



Cape Ann Granite Co. On the rim of Old Pit, Bay View, is the locomotive "Polyphemus." Workers at bottom of pit pose with raised hammers. *Circa 1885*

I

All but one of the Cape Ann, Massachusetts, granite quarries are silent and water-filled, the only sound the distant cry of a seagull planing in the blue overhead or of a small, wild bird flitting over the surface of the still, green depths. Many of the bigger quarry pits, about fifteen of them, are more than one hundred feet deep with water.

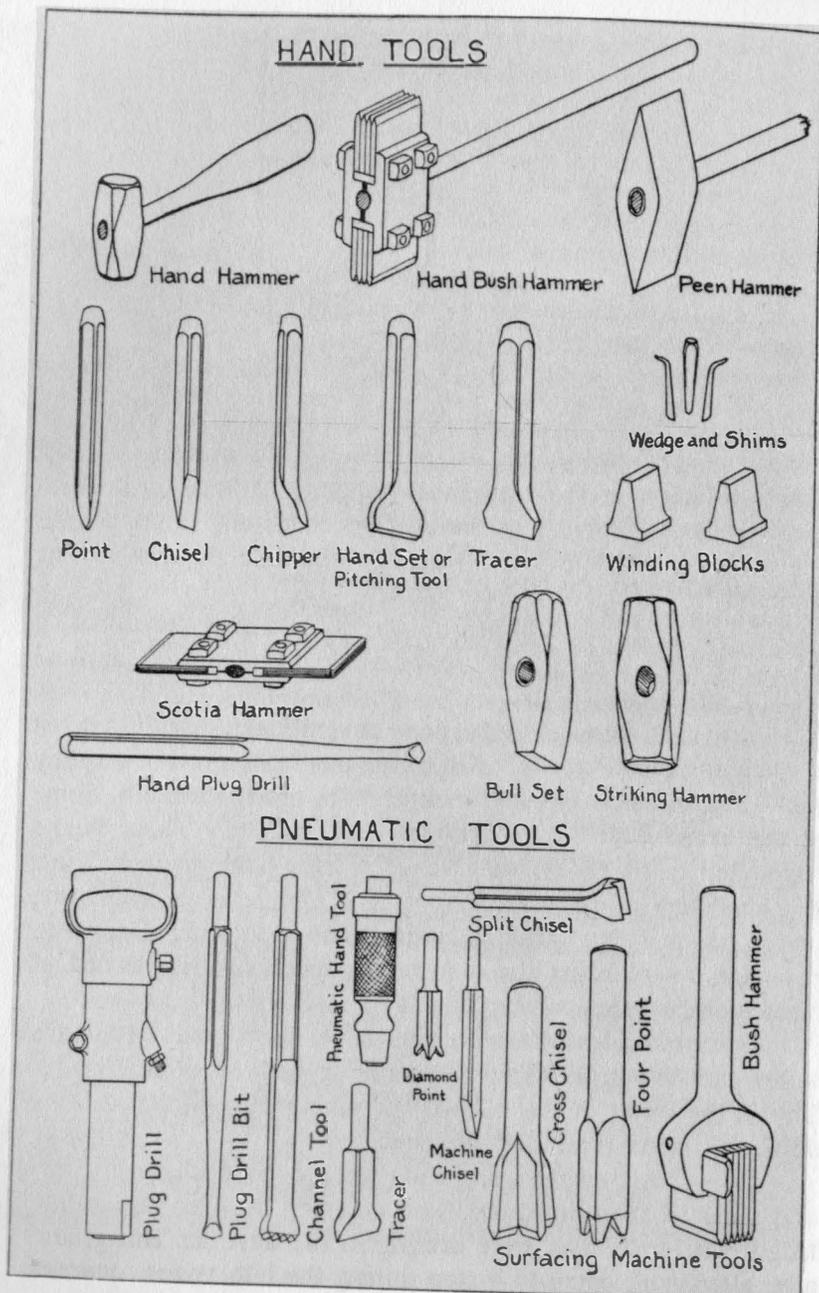
It has been just fifty years since the last quarryman picked up his toolbox from the ledge and walked home after the final whistle sounded.

Gray and rust-colored ledges are outlined sharply against the sky at the quarry pits. Most of the pits have a rim of scrubby pine trees close to the upper edges, like green sawteeth. Some of the irregularly shaped pits have cliffs dropping sheer to the water and below, sometimes as much as a hundred feet. Some are challenging jumping-off spots for nimble boys swimming in the summer, but would make anyone who walked close to the edge not realizing the quarry was there until it yawned at his feet turn pale.

On some sides of the quarry, ledges drop gradually to the water and below the surface, usually in twelve-foot high steps. This is the result of the old way of taking out granite, drilling down to where its natural lift occurred.

When the quarries were being worked, pumps chugged day and night to keep the water from creeping up over the bottom ledges where the men were drilling in the daytime. But gradually, after work came to a stop during the late 1920s, quarries filled and have remained that way.

Close by the pits one can see many sky-flung grout piles, forty- to sixty-foot heaps of castoff stone placed there by derricks or dumped from small cars that ran on inclined tracks. In a modern quarry, this stone would have been used down to the



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last fragment. Now all that remains of the track itself is a vague, lumpy outline in the flat, tangled grass growing over it.

At least three quarries have derricks still set up on the bottom ledge, completely under water. Many an oldtimer has told how he could see the boom until twenty years ago, and now the top of the mast, all ninety feet of it, has been hidden from sight by the rising water.

Gloucester has one quarry that has become a water supply—the Old Pit quarry in Bay View, called the Klondike. It was actually a small quarry worked next to Old Pit. The city also owns Vernon's Pit in Lanesville. Stone is still taken from its grout piles when needed by the Department of Public Works.

Pigeon Cove has a large reservoir in Upper quarry, once worked by the Rockport Granite Company. Steel Derrick Pit, owned by a private association that requires an identification card of anyone planning to swim, is also in Pigeon Cove.

This, plus the lacework of twisting, narrow roads that used to connect quarries in the old days, is all that remains of Cape Ann's great granite industry, which thrived from 1798 until the 1920s. Millions and millions of tons of stone were blasted from the northeast part of Cape Ann and shipped out, mostly by boat, perhaps only to Salem, or as far as Baltimore or Houston.

The peremptory whistles that shrieked three times a day, the clatter of steam drills, the intermittent blasting, together with the chorus of men's hammers striking their drills with a metallic clink, were a unique symphony of sound on Cape Ann for over a hundred years. People couldn't imagine life any other way, but the end finally came with the development of concrete and steel. Granite became as obsolete, except for art work and veneer, as the village blacksmith.

At one time people actually worried about exhausting the supply of stone. In colonial days, no one realized that Cape Ann was almost all granite, solid to the core, with stone running down hundreds of feet. Around Boston, where so much building was going on, a law was passed so that use of field stone, even for foundation work, steps, or walls could be controlled. Many field boulders were scattered all over the land in all sizes, as they are in the woods today. But although the Colonists noted the outcroppings of even-grained granite, no one knew how to work it free.

This was true on Cape Ann, too, especially in the northeast part from Bay View around through Lanesville and Pigeon Cove

to the Rockport town line. The glacier of ten thousand to fifteen thousand years ago had scoured off the debris and everywhere exposed great crags, spiny ledges, and veritable small mountains of solid stone. The melted edge of the glacier also left a terminal moraine of thousands of field boulders, ranging in size from a squash to that of a house. The ledge stone was a medium gray granite with an even pattern of feldspar and hornblende, and it gleamed with quartz and mica. Later, tests were to reveal the granite as the strongest in New England.

Because of the shortage of stone around Boston, it was a marvel of the ages when King's Chapel was built of surface boulders from Braintree in 1754. Quarrying stone was as yet undeveloped. No one knew how to break up the stone except by the primitive method of building a fire on top of it to heat it, then clearing off the ashes and striking the stone with a heavy iron ball dropped by a chain. Attempts at quarrying the granite were also being made by using black gunpowder to break it up, but it was hard to use the pieces that resulted, they were so uneven.

It was just about this time that German immigrants introduced a new method of shaping and finishing stone called "hammering." After making a groove in the granite, it was possible by hammering along the groove to split the stone almost every time and at least obtain some smooth sides and workable pieces.

Quarrying had developed very quickly at Rockport shortly after 1798, when stone was needed for the tremendous job of building up the fort on Castle Island in Boston Harbor. At that time, the island was the state prison, but in 1803 a new prison was being built at Lynde's Point, Charlestown, to be finished in 1805.

These dates help to fix the year that splitting granite with flat wedges was begun, because Governor Edward S. Robbins, who was serving as commissioner, was looking for granite building blocks for the new prison in 1803.

During his search for quarries to supply him with stone, the Governor drove in a chaise through Salem one afternoon, looking carefully at the foundations of all the buildings as he passed down the street. Suddenly, he stopped his horse, for he had noticed something different. In all his tours of quarries, and in all his inspections of granite, he had never seen large stones showing the marks of a tool every six inches.

4 The governor asked to see the owner of the building, who

gave him the name of his contractor. He in turn identified a stonecutter named Tarbox who lived only three miles away in Danvers.

Governor Robbins, hurrying to see the man, found that Tarbox split granite daily just doing his job. He drilled holes first, six inches apart and in a straight row about four inches deep, and then set in his flat wedges and flat shims. By tapping them with his hammer in turn, evenly and carefully, he broke the stone along the line designated by his drill holes.

Tarbox had no idea that the work was anything important or different. In fact, he seemed puzzled at the Governor's interest. But the Governor knew that this was a new method in the growing granite industry, and it could mean a big difference in securing stone at a good price and in good supply, especially for the building of Charlestown Prison.

Governor Robbins asked Tarbox to go to the Quincy quarries with him to show the men how to split granite as he did. The stonecutter was reluctant to stop work that long, until he saw that the Governor intended to make up for the loss of wages, give him money for expenses, and see that this family was cared for in his absence. The Governor even bought him a new suit, he was so elated.

The first experiment in splitting stone with wedges was made in Quincy, one Sunday in 1803, by Josiah Bemis, George Stearns, and Michael Ward—no doubt after seeing Mr. Tarbox's demonstration.

Local historians claim that the Quincy men were the first 'to split stone that way. However, Joseph Procter, who lived in Danvers until 1766, came to Gloucester that year to live at the "Cut" near the harbor. According to the Procter family history, "The Procter Gathering," he is the one who first demonstrated the art of splitting granite to the people of Cape Ann. Although the exact year isn't known, it would seem much earlier than Quincy's date of 1803. Since Mr. Procter came from Tarbox's home town, it is likely that he knew of this stone splitting method and was eager to show Cape Ann quarrymen just how to go about it.

Perhaps one of the biggest building projects those early Cape Ann artisans undertook with their almost primitive granite quarrying methods was the Salem jail, in 1813. It was then referred to as the "Stone Gaol." Not much has been said about the building of the jail on St. Peter's Street, perhaps because



Photo courtesy Essex Institute, Salem, Mass.
Salem Jail, built in 1813, as it looked during alterations begun in 1884.
One of the earliest Cape Ann granite structures.

most people prefer not to think about the unpleasant reason for its being there at all. It is made of massive stone blocks, most of which are fifteen feet long.

These granite blocks, fitted together so closely, were taken from the Old Pit quarry in Pigeon Cove and brought into Salem in the sloop *William*, starting in 1811 until the building was finished.

In October 1812, the Stone Gaol building committee officially visited the site and reported that work had progressed to the first story of the square-shaped structure. On the south end the stones were in ten courses and most of the individual granite blocks measured fifteen and sixteen feet long. On the front of the jail, stones were about twelve feet long, with fifteen-foot stones in the middle. Others were shaped to fit around the iron-barred windows. Walls were three feet thick. Stones in the back of the building ran eleven feet on the sides and were sixteen feet long in the center.

Granite contractors for the Stone Gaol were listed as Whittredge and Green, Joseph Newhall, "and others," all of whom were paid sums for granite during 1811 and 1812 as they sent the stone in.

In 1884 huge stones were taken out on two sides of the old building, and for five years additional work was done until the wings and towers were completed, also of massive pieces. The yard around the jail resembled a quarry with hand derricks and slabs of stone everywhere.

The original stonework in the Salem Jail is some of the oldest in New England. There has been some talk in Salem of closing the building and turning it into a museum, with a new interior if possible, thus preserving the handfinished blocks but obliterating the jail itself.

The demand for granite blocks for the building of Bunker Hill Monument in Charlestown, Massachusetts, beginning after 1825, brought about a new surge of interest in using granite for building. Another significant development in the granite industry was the appointment of Solomon Willard, born in Petersham in 1783, as architect-superintendent of the obelisk-shaped project. He was a master of many arts—a wood carver, an inventor of the hot-air furnace to heat buildings—and a top architect.

Willard devoted his tremendous energies toward finding the best way to secure granite to build the monument. His relentless

search for better methods in quarrying and finishing stone led to many improvements that were at once copied by Cape Ann quarrymen. He used a new pulling and hauling jack, which he developed at the Bunker Hill quarry in Quincy, and he installed the Almorán Holmes hoisting apparatus, forerunner of the big bull-wheel derrick, at the monument site. He also used hoisting jacks in the quarry, having perhaps a dozen of them from time to time.

The intrepid Willard was so conscientious about building the obelisk that he is said to have hiked three hundred miles to visit ledges for possible quarry sites. After viewing an exposed ledge on Lawrence Mountain on Cape Ann, he is said to have proclaimed it the best granite in the state. But he couldn't quarry it at such a far point from the Charlestown dock. He already had his eye on a quarry only twelve miles from Bunker Hill Monument, and this later did become Bunker Hill quarry.

Willard estimated that 9,000 tons of stone would be needed for the obelisk and 1,400 tons for the foundation. The outside of the monument would require 2,600 tons alone. To move the stones from the quarry to the river, Gridley Bryant designed and built his famous granite railway, the first in America, chartered in 1826. The stones were towed in flat-bottomed boats to Deven's Wharf, Charlestown, and then teamed up to the monument.

Willard had stones scattered all over Breed's Hill, piled here and there by size, close to the building site, while he waited for certain blocks to arrive. Even though he gave his quarry superintendent drawings of each stone he needed, together with precise measurements, the stones didn't always come in that order, probably because of quarrying difficulties.

The Holmes hoisting apparatus was used for setting the first fifty-five thousand feet of granite in the monument. When James Savage took over the hoisting contract in 1841 he used steam power, very new and efficient. In fact, Savage continued to use the same hoist to take passengers to the top of the monument a year after it was finished, charging them twenty cents for the ride.

In that day, granite men marveled that the hoisting apparatus, as they called it, could reach so far and perform its work so well. It had a gaff or arm fifty feet long so that it could swing about a hundred feet in a circle and move anything within that area up to 50 or 60 tons in weight. But it couldn't

turn freely on its base as the bull-wheel derrick of today can do. In performance, it resembled a stiff-legged derrick of the early 1900s.

The lifting jack consisted of a rack and one or more wheels and pinions according to the power required. It was a primitive looking thing, and was being used in granite work for the first time after being adequately reinforced with iron.

A pulling jack was also designed to be used with chains for carting and hauling out heavy blocks of stone. It had a crank pinion and a rack and claw. By doubling up the sheaves, pulleys with grooved rims, the jack could pull at least 20 tons instead of 10.

The hoisting jack was actually a timber frame called a "horse" set over the stone to be raised. It had a screw and nut on top. A chain from the weight led to a shackle that was connected to the screw. The nut was then turned around by long arms, and the stone raised to a height sufficient for a wagon to be pushed under it. The stone was centered over the wagon and when ready was lowered into it. Sometimes they used two horses and screws if the stone block was long.

The monument project, long dreamed of, really began on June 17, 1825, when the cornerstone was laid by General Lafayette, and Daniel Webster spoke. Willard was then to spend eighteen years at work before the monument was finally completed.

In 1829 work had to be suspended for lack of funds to pay the wages of the quarrymen and all the others who worked on stone—even to pay bills for hay for the horses and oxen. Only fourteen courses had been laid to a height of thirty-seven feet, four inches.

Work began again in June 1834 until it was thirty-two courses high and then the monument top was boarded over again for lack of money. This time the women of Boston and surrounding towns put on a giant fair in Quincy Hall near Faneuil Hall. They netted \$30,035.53, which they turned over to the Bunker Hill Monument Association to complete the obelisk. This together with other generous gifts was enough to build the monument up to its two hundred and twenty-two feet, as originally planned by Loammi Baldwin and Solomon Willard.

On Saturday, July 23, 1842, at 6 A.M. the capstone, securely lashed to the derrick hook, was hoisted to the top of the monument. On the stone, holding to the rope, rode Colonel

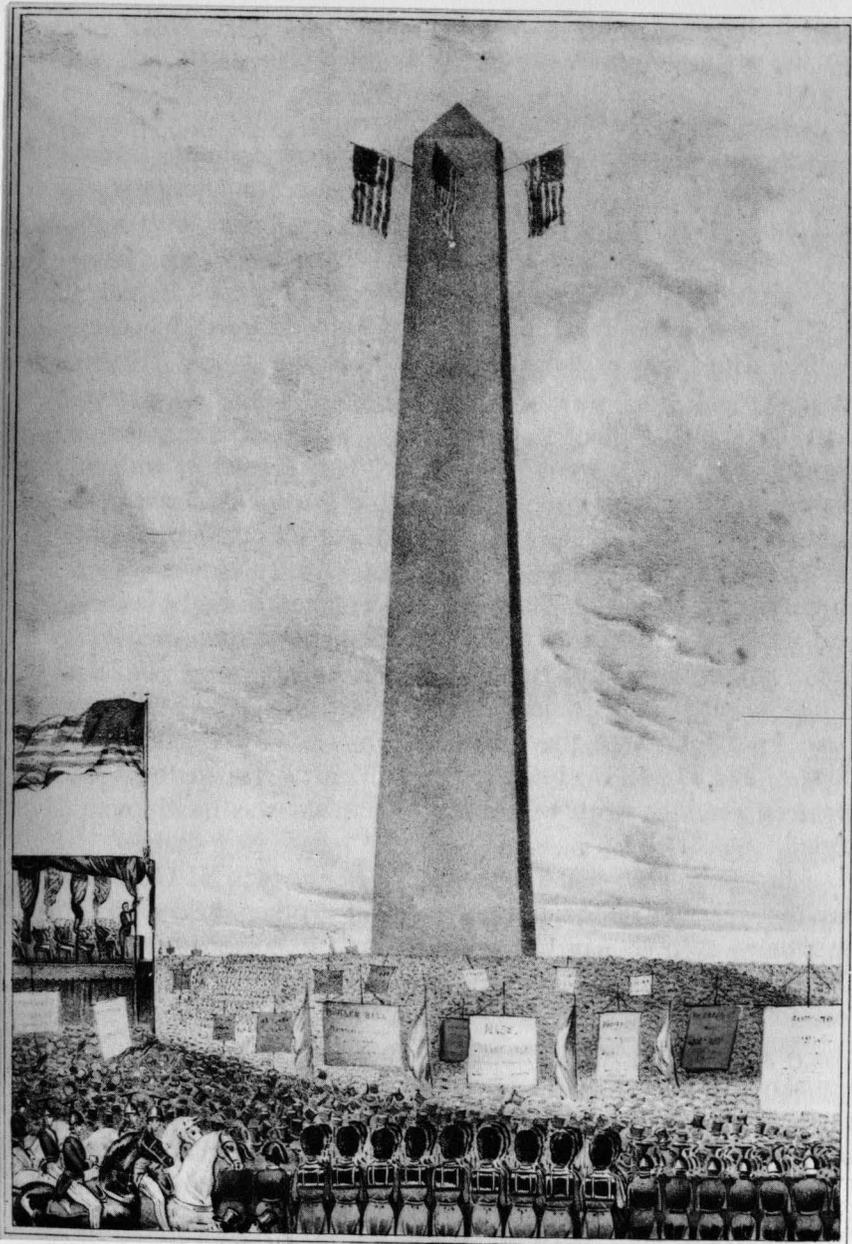


Photo courtesy Library of Congress
Bunker Hill Monument completion was celebrated with a pageant and a speech by Daniel Webster, on June 17, 1843.

Charles R. Carnes, waving the American flag. The trip took exactly sixteen minutes. At 6:30 A.M. the capstone had been bedded and a national salute announced that the Bunker Hill Monument was finished at last.

Willard stayed in the granite business for many years, taking great pride in the way he cut expenses and increased the use of machinery. He was well known in all the quarries, especially on Cape Ann, where he made frequent visits.

An early contract for Cape Ann granite was for the building of the Newburyport, Massachusetts, Customhouse, designed in 1834 by Robert Mills and now a museum in that city. The granite blocks were taken across Ipswich Bay by sailing sloop direct to the Newburyport wharf on Water Street, where the building is located. The quarry could have been in Bay View or Lanesville.

Early in 1833, St. Peter's Episcopal Church in Salem was completely rebuilt with 1,500 tons of granite brought in from Pigeon Cove. It took a year to complete the job. Oxen pulled the granite from the Salem wharf where it was unloaded. The size of the blocks seemed large for the time, but it was really "two-man stone." The name indicates that it could be handled without expensive machinery other than derricks for hoisting.

Early eighteenth century stonecutting also included street and lane markers—those pieces of ledge like heavy posts that taper at the top. Many are still standing. The stones are actually slices of beach or pasture ledges.

Also laboriously shaped by hand were millstones, well curbings, and mooring stones for boats. It is said that the first millstone to be shipped out of Cape Ann was sent to Newburyport across the bay, about the year 1800, out of Lobster Cove at Annisquam. Many more must have followed it, for someone exploring an old factory there a century later discovered a veritable "gang of millstones," much to his surprise.

Rigging a mooring stone was an involved process. A round hole about fifteen inches in diameter was drilled out of a piece of flat ledge about six feet square and eight to sixteen inches thick. The fisherman who intended to moor his boat in the cove selected an oak tree a little less in diameter than the hole in the stone, cut the top off about twenty feet from the base, and hauled the tree, roots and all, out of the ground. He pulled the butt, top side first, through the hole in the stone and the roots kept it in place.

Then the fisherman slid the stone with the oak butt on a raft and poled it out to where he wanted the anchorage to be, sliding the huge piece of ledge and oak over on rollers so it sank immediately. Its twenty-foot butt became a mooring mast standing well above the high-water mark. The stone probably weighed two tons, so it was unlikely that the mooring would ever move from its location, and oak was noted for retaining its strength in water for many years.

Joshua Norwood of Rockport, who was born in Annisquam in 1683, made the first mooring stones. In 1710 he had made them for more than forty fishermen who had boats at Long Cove and the coves on the north side of the Cape. His son Joshua, born in 1707, carried on the family tradition and fashioned mooring stones for boats as far away as Eastern Point.

One of the earliest granite companies doing business in Rockport in the first part of the 1800s was Preston & Fernald Company. A third member of the firm was a stonemason named Levi Sewall. Sewall made stonework his whole life, building his own home of Rockport gray granite in 1830. It is now owned by the Sandy Bay Historical Society and is located at the corner of King and Granite streets near the town pump.

Preston & Fernald Company shipped their stone from Knowlton's Wharf, which is still in existence, privately owned by descendants of the Knowlton family. That wharf has its original capping stones of granite, almost pie-shaped the way they are fitted together. Of very old granite work, each piece has a buff-colored band of stone on the outside edge. They appear to have been split off the same exposed and well-weathered ledge, which could account for the color.

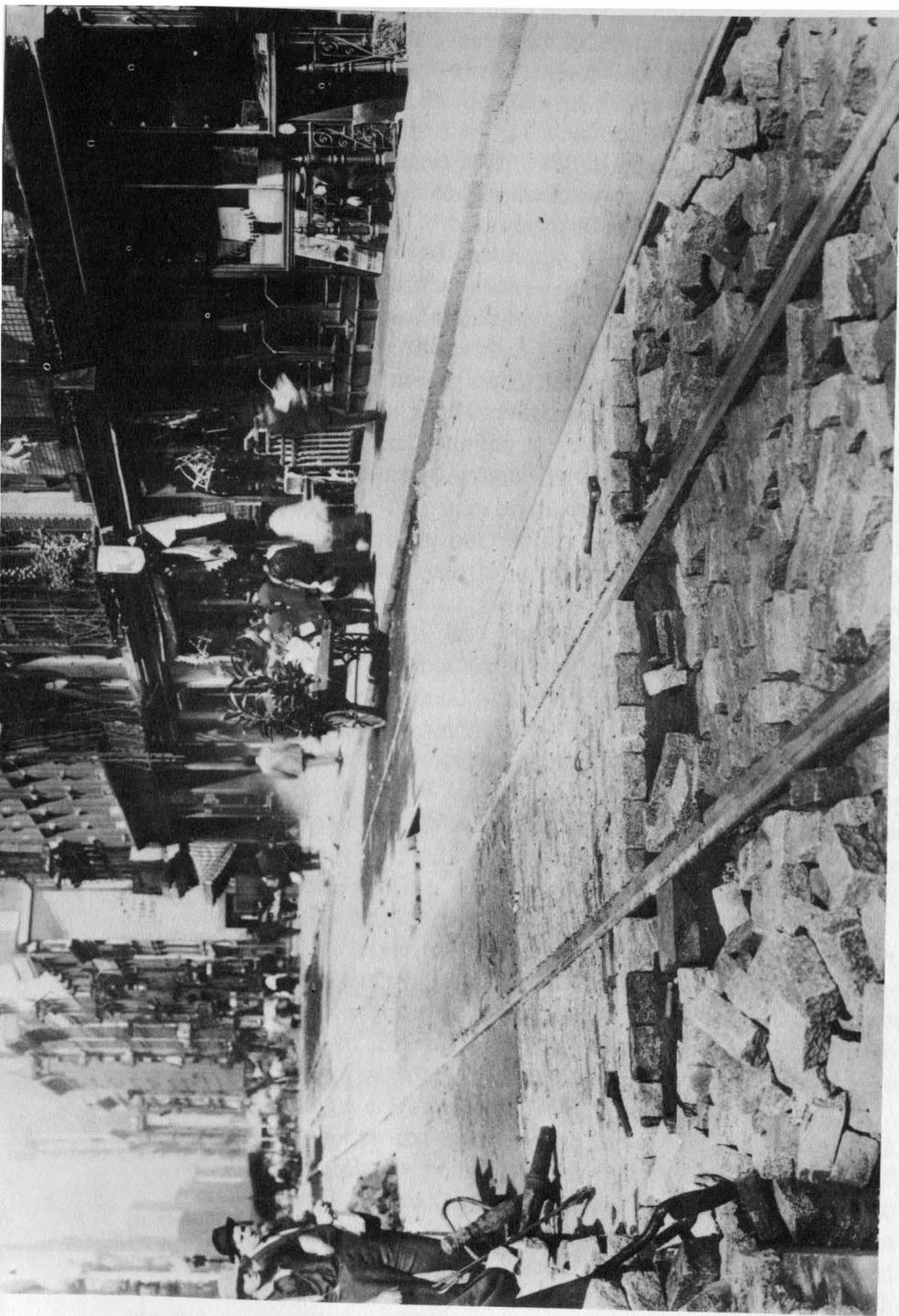
The quarrymen of the day, all newcomers to Rockport, came mostly from Maine and Vermont, and boarded at the Azor Knowlton home at the wharf if they worked for Preston & Fernald. Mr. Knowlton was a teamster who hauled many loads of ledge per day and methodically entered them in his record, kept in a leather-covered journal.

Quarrying at first was done on the exposed ledges on both sides of the highway going through that part of Rockport and through Pigeon Cove. In fact, Preston & Fernald blasted out the big ledges near the waterfront, and in one place took a twenty-five-foot high ledge away from the hill. Mr. Fernald built his house in the space it left. It can be seen today with the granite like a cut-away bowl behind it.

Not much attention had been paid to granite paving blocks in the area until Nehemiah Knowlton advertised a load of cut granite for sale in a Boston newspaper on April 17, 1823. During the winter and off season, he had split up four hundred tons of granite at his quarry, not far from the Lurvey house.

Led by a Quincy man called Major Bates, leading granite men of New England came to Rockport to see the new supply that perhaps could compete favorably with that from Quincy. The Major was particularly impressed—so deeply that he stayed in Rockport, going into business with William Torrey, who was to become a leader in the granite industry in later years.

This was the time when hand-fashioned paving stones were wanted, because they gave a much smoother surface to the roads than rounded cobbles from the beach. Horse and wagon traffic was increasing, and there was a definite market for paving blocks. This was to give the small quarry operator a big chance at the growing granite business.



Paving blocks being set in Spring Street, New York City, by the Rockport Granite Co. Taken September 21, 1914.

II

In the birch and pine woods of Lanesville, close by a small abandoned quarry pit, there is a projection of granite ledge about the size of a coffee table. Around its base, an area now thickly tangled with briars, are chips of gray stone that an early paving cutter spread about as he drilled, hammered, and split blocks, using the natural table upon which to work. Perhaps the granite blocks were later set in the streets of New York City, or Havana, Cuba; or they could have been sent to Gloucester only six miles away.

It is impossible to walk more than a hundred paces in the northeast woods of Cape Ann without finding drill marks on an upthrust ledge or coming upon a pine-needle covered mound of stone chips. Perhaps the biggest and longest paving cutters' "dump," as the mounds are called, was at Moving Rock swamp close to Blood Ledge quarry in Bay View. Most dumps have long disappeared, trucked off for modern driveways and road-building.

Any man who wasn't "goin' sloopin' or fishin'" procured kegs of black blasting powder, rigged up a small derrick, and started to quarry for paving stones at a likely spot in the woods or close to the water. These small operations were called "motions"—a quarryman's word for a two-man quarry. The men worked as a team, one turning the hand derrick to shorten the cable after the other had fastened the dog hooks to the stone so it could be lifted out.

Many men were inexperienced, especially at handling black powder for blasting the ledge free from its bed. At the Andrews, Sargent and Co. ledge at Lanesville, in August 1871, perhaps the most terrible accident they had had for years occurred. Three doctors were sent for, and all three found plenty to do as a result of can fragments and flying rock.

Lewis Saunders, in charge of the blast, had set in powder and successfully freed part of the ledge, but a second charge was needed. Carefully, he swabbed the hole with water to put out any fuse remaining, and then sprinkled on a little black powder to see if any fire was left. This didn't ignite, so a full keg of black powder was carried over and placed on the ledge. Meanwhile Mr. Saunders used up the powder left in the keg he was holding.

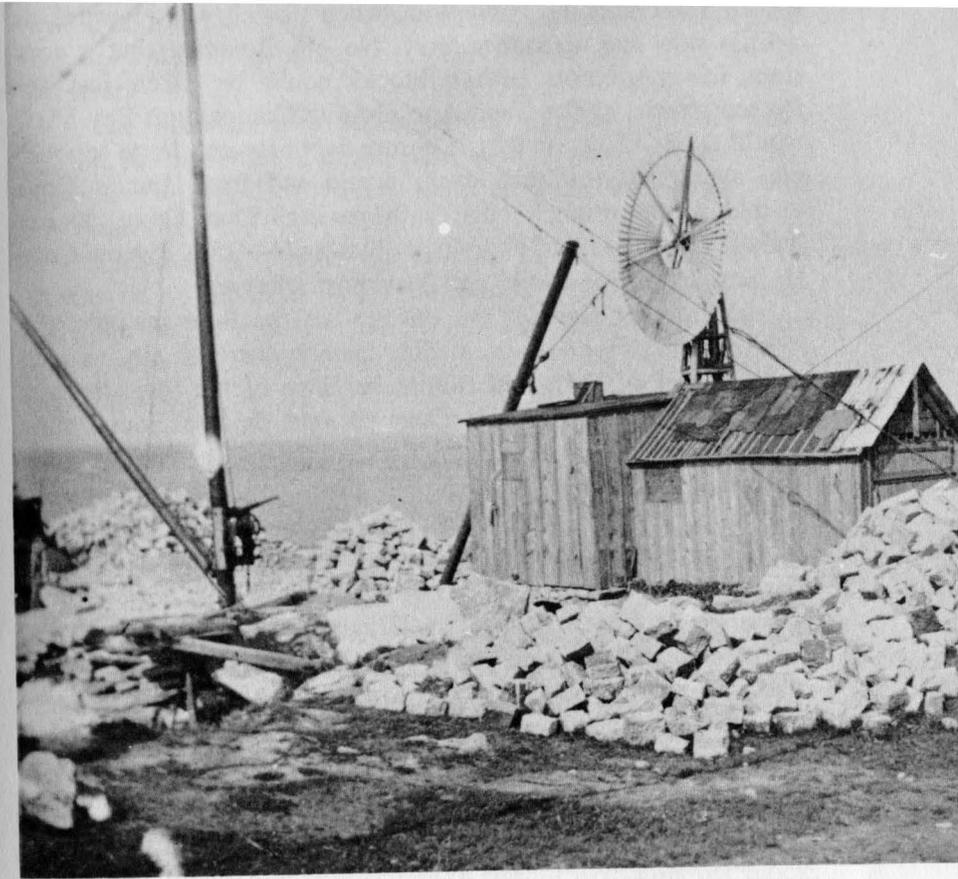
He had put in two dippers of powder when the whole charge blew. The full keg of powder on the ledge ignited with it. Men who were watching were seriously burned and one was badly cut by flying stone. Charlie Bowden, a young boy who was looking on, was burned and also injured by stone. Saunders was hit by pieces of the keg that held the blasting powder and was badly burned.

Many motions were discovered purely by chance. Leonard Johnson, the Swedish quarry operator at Pigeon Cove, actually stumbled over a ledge while rabbit hunting. He developed it by quarrying paving blocks and then foundation stone. By the sixties it had become a quarry big enough to furnish the giant 20-ton blocks for the Providence Granite Co., at Providence, Rhode Island.

Some of the motions developed in the rush to turn out paving blocks were Harvey & Jones, Robert Hooper, Jordan's Quarry, Parsons Quarry, Rice's Quarry, and Ricker's Quarry at Annisquam; Clifford & Hale, Asa Hood, and Jones Bros., at Bay View; William J. Niles and Pomeroy Ledge at Eastern Point; Nickerson's Pit at Folly Cove; Christian Bedders, Thomas Erwin & Co., Falk & Mason, F. J. Reid, and Ezra Sherburne at Lanesville; Charles Dorman & Son, Dorman & Umlah, Eames & Waite, Benjamin Hale, Abraham Lurvey, A. C. Pierce & Co., Rat Pit, Squam Hill Granite Co., Story's Quarry, and Whitney's Quarry, at Pigeon Cove; Stephen Andrews Quarry at Riverdale; Andrew Lane at Rockport; and Herrick's Hill, Somes Hill Granite Co., and Squam River Granite Co. at West Gloucester.

In gangs of four the paving cutters in the larger quarries lined one side of the car spur or quarry railroad siding, where each had rigged his own jiffy shelter from the sun in summer and the raw winds off the bay in spring.

Sometimes the paving cutters' bunkers were eight or ten wooden stalls with hinged roofs—all a part of the general cutting yard plan. This was quite in contrast to the years just



From the Alexander R. Cheves Collection
One Swedish motion operator, near Lane's Cove on the north side, had a windmill to pump out excess water.

before 1861 and the Civil War, when paving was regarded as a little side line at each quarry. No one dreamed that a contract for 5,500,000 paving blocks could be taken just for Boston streets, as the Cape Ann Granite Company at Bay View would do in 1874, or that in a month, thirty-one large schooners, averaging 200 tons each, would sail from Lane's Cove loaded to the water's edge with paving. That figure doesn't include the schooners and sloops that sailed from Pigeon Cove Harbor, Hodgkins Cove, and Rockport wharves.

A familiar sight at the coves were the three-masters, the "Philadelphia" schooners, loading paving for that city as well as Washington, D.C. and Baltimore. Two of the three-masters were squeezed into Lane's Cove at one time, although they were never fully loaded while tied up there. The vessels were warped out through the gap until they rode offshore, where loading could be finished with plenty of deep water underneath.

From the quarries up in the hills of Lanesville and Pigeon Cove, heavy wagons heaped with paving blocks were drawn by horses or oxen to the piers. There the loading derricks on the schooners picked up the wagon body of each and hoisted it aboard, tipping out the blocks to thunder down a twenty-five-foot wooden chute bound in iron. In the schooner's hold, men moved swiftly to stack the paving blocks, passing them from hand to hand.

Blanchard Mitchell of Lanesville was a man to watch as he drove his pair of oxen to Lane's Cove for the Lanesville Granite Company about 1890. Children on the way to school always stopped to watch him as he nervously urged his oxen to what he hoped was speedier walking. But they never seemed to move faster, even though the driver ran back and forth, down the hill in front of them, scampering alongside, and then flitting behind them like a mosquito. The oxen only continued their placid, plodding gait. Everyone agreed that Mr. Mitchell ran ten miles to the one that the oxen covered. But the man was eventually accorded a great rest, for he became the crack engineer of the "Nella," the locomotive of the Bay State quarry railroad from Lanesville to Pigeon Cove.

From the quarry, rough pieces of granite, each as big as an old-fashioned TV set, were carried on a four-wheeled car via an inclined railroad spur to the row of waiting paving cutters. The car was stopped by a hand brake and the block of granite carefully tipped out at the man's bunker by pulling

a pin. Most cars tipped in only one direction, but if topped with a double platform, they could be tilted to any side, depending on which controlling pin was knocked out with the big hammer.

The foreman then scratched the number and the name of the paving cutter on his slate with a piece of chalk and methodically checked to see who next needed stock from the quarry.

The stonecars made the reverse trip to the edge of the quarry on a winch run by a small donkey engine in later years, although larger quarries like Blood Ledge in Bay View and Flat Ledge in Rockport had locomotives to do the pulling and hauling.

Paving cutters thought there couldn't be any more sizes when there were six, but before they were finished in the 1920s, the men came to know thirty-two different sizes of street paving blocks needed in hundreds of cities in the northeast and in southern ports. Sizes were usually determined by measuring the distance between the toe and heel calks on a horse's shoe. They were arrived at, too, by figuring which size would wear well in the street and still give a horse a secure foothold and the wagon the smoothest ride.

The rift or "easy way" side of the granite block was marked on each piece at the quarry as it was lifted out of its bed, but skilled paving cutters used only their sensitive fingertips to detect the best splitting direction.

Usually the cutters were paid a rate of five cents per block, so that they earned about three dollars a day, or as much as thirty dollars a week in 1915. They averaged one hundred fifty to two hundred blocks a day, according to a neat tally kept in a leather-bound paving cutters' book by the foreman at each quarry. Each day he listed the type of block cut, the man's name, and the total number of blocks shaped.

Karl Persson of Pigeon Cove, retired quarry operator, said he once cut four hundred fifty blocks in four hours for eleven dollars. "I had to do it," he explained. "I was going to marry the boss's daughter and I needed money. Besides, Anna said she wouldn't marry me if I couldn't cut those blocks in four hours. I had no choice."

To make the first split from his stock piece of granite, the paving cutter drilled a series of holes along the rift so he could get the longest split. Then he put in plugs and feathers,



Complete with pipe and jaunty soft cap, Finnish paving cutter John Mylly of Lanesville smooths blocks he has just split. Note chipping tub, left.



From the Alexander R. Cheves Collection
Paving cutters at their bunkers at the Cheves Green Granite Co., Lanesville. Tree limbs form frames for sun and wind shelters when needed.

and with careful hammer blows, split this block in two. Next, he cut a line of fracture into the top of one of the stones with a chisel edge to the depth of one-fourth of an inch, blowing out the dust as he worked. Then he drilled a single hole for the short, stubby bull wedge. After he set the wedge in place, it took one mighty blow with a twenty-pound hammer to split the block. This procedure was repeated on the second stone.

To make the final break, he took each quarter section, marked the line of fracture with a hand chisel, then turned it over and struck it opposite the mark with the flat face of a hammer.

When he had eight blocks, he faced them, smoothing away the bunches to the required measurements with a rectangular hammer having a square, flat face. He cut with the edge of the hammer. As he worked, the chips fell into a wooden tub that he used as a table. These were later emptied to one side to form the eventual dump or mound.

Small boys were sometimes hired by individual paving cutters in the summertime or after school to do the drilling for the first split, the plug drilling, at a half cent a hole. This was before the men used compressed air drills. The boys earned enough to buy a baseball glove or some other treasure at the company store by the end of a few weeks.

Inspection of paving blocks as to quality and size was always done at the quarries. But at the Rockport Granite Company's bunkers on Granite Pier, where paving cutters worked in a row, blocks were subject to a sudden but informal check by Charles S. Rogers, president of the company. Without a word, he plunked his size ten shoe on the top of a block he spotted, and not another thing was said. The paving cutter knew he had an outsize or undersize block, for old Charlie Rogers was never wrong.

The quarrying of paving blocks really began when a Pigeon Cove resident, Amos Rowe, tackled a house-sized boulder at the top of Pigeon Hill in the early days of the stone business. No one knows the exact year. He figured it weighed more than 2,000 tons. From it he cut thousands of feet of edgestone and other "marketable stock," which no doubt was paving blocks.

The first formal contract for Cape Ann granite paving blocks was filled by John Stimson, who was at that time operating at Flat Ledge in Rockport. The blocks were sent to Boston Harbor to be used on Fort Warren on George's Island,

and they were carried there in the sloop *Fox*. It is believed that only after this happened did the leading operators in Rockport and Bay View realize that each man's woodland was not useless, but actually a valuable asset.

Beniah Colburn of Bay View, who was in business early on Cape Ann, beginning in 1827, sent paving blocks to be set in Exchange Street near the Merchant's Bank Building in Boston. They were the first to be laid on the edge instead of the flat side.

Block sizes were cut down gradually, as it became apparent that horses could obtain a better footing on the smaller blocks. Then came the Guidet block named for Charles Guidet, the New York businessman who operated the Bay State quarry at Lanesville. The approximately four by ten by eight-inch block was also called the New York block, and it was first sent to be set in on the lower part of Broadway in 1868.

The Guidet block had a close relative, the Manhattan Special, used in later years through the 1920s. It measured 3-³/₄ inches to 4-¹/₄ inches wide; 4-³/₄ inches to 5-¹/₄ inches high, and 8 to 10 inches long. It was set on a concrete foundation with an inch of sand as a cushion.

Washington blocks, in 1892, and Philadelphia blocks were both smaller than Manhattans. In 1895 paving cutters were chipping at Florida paving, and in 1906 the Rockport Granite Company accepted a big contract for Cuba blocks to be sent to Havana. These were loaded at Bay View pier and at Rockport.

The newer Belgian blocks, in contrast to the early slabs of stone used in Boston, were actually rough cubes of stone, easy to hold in one hand. They were not less than five inches wide; not less than five inches in breadth, and had a depth of six to seven inches. These were the blocks hurled at the Federal troops in 1861 when General Butler arrived in Baltimore during the Civil War. Many of Butler's men had helped quarry the stone the previous season, and they were twice as angry at being hit by their own paving blocks.

There were Boston blocks, large and small, and the famous big New Orleans blocks, sent south by Colburn in 1857, originally large slabs measuring twelve by twenty-four by eight inches.

In 1893 the City of New Orleans was still buying paving from Cape Ann, as an agreement preserved in the old records shows. In it Callendar I. Fayssoux of that city was to "pave

Burgundy Street from Canal Street to Bienville Street with blocks of good hard northern granite."

Some of the old blocks had smoothed out under traffic, and smaller paving came into vogue, so in 1914 the City of New Orleans decided to have a gang of northern paving cutters come down and resize the blocks. Paul Lundberg, veteran paving cutter of Lanesville, one of those who went down, said they worried at first about splitting the stone, for granite that has been out of the quarry for a while is usually harder to split. "But we didn't have any trouble," he added.

Before granite was shaped and used for paving, people had relied on cobblestones from the beaches. Long before paving cutting was heard of, Cape Ann beach stones were loaded and shipped into Salem and Boston to be used in paving areas of their main streets.

According to the Reverend William Bentley of Salem, whose published diaries contain a storehouse of information, it was on March 19, 1792 that the Town of Salem decided to pave from the corner of the Old Meeting House to the corner leading on to the common. Then if there was money enough they would pave eastward. This would include Essex Street from Washington Street to Washington Square.

Cape Ann cobbles were probably used. They were found on Milk Island or Norman's Woe in those early days.

But after paving cutting developed, it was a common thing to find an advertisement in the Cape Ann newspaper announcing that the City of Salem needed fifty thousand blocks for road paving.

A crowd of interested men gathered in Damiana Square at the West End of Main Street in Gloucester in 1935 to watch the setting-in of Ultimate Blocks, a new kind of pavement. No one in the granite quarrying business thought he would ever see the day that concrete and granite were used together in one product, a block produced at one of their own quarries, but it had happened.

"Uncle Tom" Fitzgibbon, as he was called by his countrymen, one of the first Irish quarrymen in Lanesville, developed the idea of making a square paving block by using pieces of granite molded into a block with concrete. But he never did anything with it, until the 1930s, when the method was perfected by the Ultimate Paving Block Corporation, a group of

New York businessmen operating the former New England Granite Company works at Lanesville.

They said it was a new type of paving unit, not a new or untried material. It was advertised as a precast concrete block with a granite face designed for the most wear on corners.

Granite waste blocks from the quarry were put through the stone crusher and then gauges were used to determine which stones were destined to go inside the block and which ones would be used for facing and edges. Special work was done on stones for the angled corners. Each surface had about fifteen cubes showing for traction. Into wooden forms the stones were placed, the spaces between filled with a fairly dry mixture of grout. Then the forms were filled with concrete and allowed to cure for thirty days. When released from the forms the blocks measured 11-7/8 inches square and four or five inches in depth.

Ultimate pavement was laid on Route 9 (the Albany Post Road between Ossining and Tarrytown, Westchester County, New York) in 1934 as a test road. It was twenty feet wide, three hundred fifty feet long. After three years, there was not a single sign of wear.

It was announced in June 1940 that twenty-seven men were working and the plant had received an order for \$50,000 worth of Ultimate blocks and their curbing—a curbing that is still being made by other companies in the state.

Ultimate paved the underpass on the Cambridge side of the Longfellow Bridge over the Charles River with thirty thousand square feet of Ultimate blocks and also supplied the curbing on Route 128 in Danvers, Massachusetts.

But in June 1943 the thirty acres of Ultimate Corporation land were sold, and the big frames used to cure the blocks were no longer a familiar sight to the lonely passerby along the wooded roads that wind by the quarry.

The coming of the automobile is generally credited for the use of asphalt, but it makes a paving cutter's heart feel better to think that on many hundreds of miles of asphalt road, especially in the large cities, the cars run smoother because there is an original layer of granite paving blocks underneath. They were too good to rip up.



Photo from the Stebbins Collection, Society for the Preservation of
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The lofty-sparred stone sloops were distinctly identified with the granite industry of Cape Ann, and they differed considerably from the single-masted vessels of their day, used in fishing and freighting.

Because of their cargo of stone, the sloops were of extra-heavy construction, usually oak timbered and planked, broad of beam, and staunchly rigged. The typical stone sloop carried a gaff-rigged mainsail, a jumbo, and one or two other jibs and topsail. Both keel and centerboard vessels were in the fleet, and they ranged in size from 44 to 125 gross tons. Some had good lines—clipper bows—but most were stubby and utilitarian.

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Philip E. Conley and Merritt Reed of Rockport, two of the crew, were relieved at watch at exactly midnight by Capt. Albert Pittee and John R. Allen, another of her crew. Already the winds had mounted to a small hurricane, and the sloop was lumbering along near Egg Rock at a pace much too swift for the load of granite weighing her down.

Capt. Pittee saw that instead of things beginning to improve, they were likely to get worse, so he called out to Conley, who was standing on the floor of the cabin fixing the fire, "Come up! We're going to reef the mainsail!"

A gust of wind tore the words from his mouth. At the same instant, the *Alfred A.* began to settle forward, sinking beneath the foaming waves like a big boulder cast from the beach. As Capt. Pittee felt the deck fall away from below his feet, he reached swiftly and unfastened the painter that led to the small boat being towed astern. But just as he freed it, he was struck a blow on the head by the derrick boom as it swung down across the deckhouse. The water swept him away at once, stunned but still conscious, weighted down by boots and heavy clothing.

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For a long time, Allen worked the small boat in the heavy

seas, and the squall blew itself out. There was no sign of the two men who had been below decks.

Allen reasoned that it would be impossible to reach the Lynn and Nahant shores, so he kept the boat into the wind and rowed with that single oar for about six miles for Marblehead. Capt. Pittee was in a great deal of pain and evidently needed a doctor as soon as possible.

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Undaunted, Allen picked up Capt. Pittee, hoisted him to his back, and set off to hike in his stockinged feet the two miles to Marblehead town. There he went directly to the police station for help. Two doctors came and examined the injured men. Capt. Pittee was found to have three ribs broken, his shoulder dislocated, and injuries to his face and head from the derrick boom.

As soon as they could manage it that Sunday, the Marblehead Chief of Police drove Allen and the captain home to Rockport in a comfortable carriage.

The Rockport Granite Company sent out their tugboat *H. S. Nichols*, their lighter *West End*, and a diver to locate the wreck and recover the bodies of the two men who were lost. When the *Alfred A.* went down she was on a course with Long Island Light southwest half west, and she sank in about twenty-six fathoms of water. Somewhere down there, not far from Egg Rock today, is a neat pile of paving blocks for some surprised frogman to discover.

John Allen was later awarded a silver medal by the Massachusetts Humane Society.

One of the earliest sloops to load with granite for Boston besides the *Fox*, sometime after 1823, was the *Diamond* that loaded ox carts full of stone at Knowlton's Cove, Rockport, for William J. Torrey Company. In those early years of shipping



Photo from the Rogers Collection
Tug *H. S. Nichols*, with flags flying in a stiff breeze, heads into the wharf at Rockport.



Sloop loaded with granite passes close to shore at Rockport, *circa* 1900.

stone, some of the most famous old sloops made their appearance. The *Splendid*, the *Monarch*, and the *Radiant* loaded for Preston, Fernald & Co. of Pigeon Cove in 1853; other early members of the "single stick" fleet were the *Arcadia*, the *Belle of Cape Ann*, the *Casket*, with Capt. Nathaniel Duley out of Lanesville, the *Jennie Lind*, the *Nellie C. Noble*, and the *Whip*.

The *Daniel Webster*, 46.1 gross tons, and *New Era*, 62.5 gross tons, were also launched in 1853. The latter was commanded by Capt. Levi Cleaves. Two years later they had launched the *Ida May*, 63.5 gross tons, and the well-known Lanesville sloop, the *Hard Chance*, 64.6 gross tons. During the early days of her career the *Hard Chance* was sailed first by Capt. Willard Cleaves and then by Capt. Ned M. Webster.

Newspapers of the day reported that the sloop *C. E. Trumbull*, Capt. Henry W. Elwell, 99 gross tons, built in 1870 for the Pigeon Hill Granite Company, had a "harrowing experience" on the night of November 29, 1880, while homeward bound from New Bedford. The sturdy sloop was hit with head winds and a heavy sea off Cape Cod, and although she labored and struggled along under a double-reefed sail, she could make scarcely any headway.

During the early morning hours, a light was sighted to port that the pilot thought was Race Point. The course was at once corrected. But only ten minutes later, with an ominous crunch and shudder, the *Trumbull* struck hard and fast on Peaked Hill Bar, a graveyard for many a ship.

A Coast Guard beach patrol fortunately had seen the sloop snagged by the bar, and they sent up a rocket to let the crew know they were coming out. In less than an hour, while the men agonized about their possible fate in the heavy seas, a surfboat from Station Seven at Provincetown, under command of Capt. David H. Atkins, reached the *Trumbull*.

The seas were running high, so the lifeboat didn't dare go alongside the captive stone sloop. Trying the only plan he thought sensible, Capt. Atkins brought the small boat in under the stern of the *Trumbull*. "Jump for it!" he yelled.

One crew member, Frank E. Elwell of Rockport, jumped into the boat and landed a-straddle the head oarsman's head. Four men, George Caldwell, James Breen, Henry Tarr, and Elwell were taken off the *Trumbull* on that first pass-by and safely landed on the beach.

Then the plucky lifeboat captain again swept his boat into

the surf and headed back to the *Trumbull* to bring in the rest of the crew, Capt. Elwell and the pilot, Theodore Poole.

Closer and closer the lifeboat was worked toward the stern of the sloop while on deck the captain and pilot hung on and watched grimly, ready to jump on command as their shipmates had successfully done.

The small boat was passing over the mainsheet, which was trailing in the water, just as it had done before, when suddenly the *Trumbull* rolled like a sick elephant. At once the heavy main boom swung from one side to the other. This tightened the sheet under the lifeboat and cut it in two like a cleaver.

Three of the surf boat's crew thrashed to the surface and eventually, after a swim of a mile through the seas and surf, reached the beach, but the valiant Capt. Atkins and two surfmen, S. F. Mayo and E. Taylor, were drowned.

It was finally flood tide and Peaked Hill Bar relinquished its grasp on the *Trumbull* so that the sloop, battered but still seaworthy, floated free. From there she was sailed to an anchorage off Chatham by Capt. Elwell and the pilot, still aboard. There they hired three new hands to replace those landed on the beach, and then set out for Boston, undaunted, even though the weather had developed into a driving November snowstorm.

The *Trumbull* sailed for a number of years after that escape from Peaked Hill Bar, but was finally broken up as a derelict at the Rockport Granite Company's dock.

In 1874 the *Jennie Preston*, 66.9 tons, was built at Yarmouth, Maine, for the Rockport Granite Company. Her sister sloop was the ill-fated *Alfred A*. And there was the *America*, a product of the old Salisbury shipyards, which Capt. Jeremiah Pettingill sailed for years. She had a powerful double-head rig that was used during the last of her career. There was also the famous sloop *Screamer*, 64 tons, which F. Hopkinson Smith wrote about his Cape Ann sloop in the novel *Caleb West Master Diver*, published in 1899.* The *Screamer* was eventually lost in a squall broad off Eastern Point while Boston bound.

Each sloop took a crew of four or five men, who hoisted the big sails by hand before hoisting engines were set in. The *John Brooks* was the first to have a mechanical hoist; then the *Hard Chance*, the *New Era*, and the *Belle of Cape Ann*. This lat-

ter sloop sank under Capt. Pittee off Misery Island, only a few miles from where he lost the *Alfred A.*

The captain of the stone sloop *Granite* of Quincy didn't fare so well on an October afternoon in 1858. Loaded with stone out of Rockport, the Boston-bound sloop struck on Yarmouth Bar. The weather was bad and blowing, so rough in fact, that the Sandy Neck lightkeeper couldn't reach her in a boat, although he tried. He had spotted two men on board just before she struck. Her sails were torn to shreds and lay buried in the surf.

On Monday the body of Capt. Solomon Torrey of the *Granite* was washed ashore at Dennis Beach. Torrey had been a veteran of the stone business for sixty years and had operated a quarry business at Rockport. In those days they referred to the business as "carrying on a ledge." William Parker of Rockport was also lost.

In 1863, in October, the sloop *Alexander* was sailing into Boston Harbor when she was run into by the *USS Ticonderoga*, a Navy sailing ship. The little sloop was carrying granite for Beniah Colburn. Presumably the men were rescued, but no more was said about it in the newspapers of the day.

The sloop *Arcadia*, of Rockport, Captain Doyle, went aground off Marblehead Neck on April 29, 1870, and no doubt pounded her aged timbers to splinters.

A patrolman walking his beat along the wharf in Newburyport on August 18, 1895 was shocked to find the sloop *Jumbo* sunk at her mooring, an ominous silence everywhere, and no one about on Balch's Wharf.

The *Jumbo* had arrived at the mouth of the Merrimack River on Saturday afternoon, heavily loaded with stone for the South Jetty. Because conditions were unfavorable for discharging the stone, it was decided to go upriver and moor the sloop at the wharf.

One lucky crew member had left the sloop for the night, but the captain, Stephen Orr, and George Welch, both of Rockport, evidently drowned in their berths. It was supposed that the vessel had grounded on the sloping river bottom and listed so far when the tide ebbed that water silently filled her hold again when the tide rose.

Until the Rockport Granite Company sent a tug across the bay with a diver, the only thing recovered from the vessel was



From the Alexander R. Cheves Collection
Schooner *Multnomah* near the Gap at Lane's Cove, coming in to be loaded for the Cheves Green Granite Co. About 1902.

the captain's coat. In his pocket they found his diary and a tintype of a young woman. Capt. Orr was only twenty-three.

Oldtimers have always said that by the rush of water around his rubber boots, Capt. William Poland of the sloop *Albert Baldwin*, 123 tons, out of Bay View, used to gauge the speed of his vessel. He was the only captain the *Baldwin* ever had, and he had helped design her at the James and Tarr yard in Essex, Massachusetts, in 1890.

The new sloop, the last of her kind, was 86 feet long, the pride of the Cape Ann Granite Company and later, the Rockport Granite Company. The *Baldwin* was named for a good friend of Colonel French, owner of the company. But the six-foot Captain Poland, whose strongest language was "Gosh, darn it!" was the only man who dared to sail her through a yellow-tailed sou'wester with her decks awash and a full cargo of stone below.

Unlike the slower vessels carrying stone up and down the coast, the *Baldwin* could whip along at twelve knots. She was always so heavily loaded with granite blocks that as she was sighted going out of the bay off Bay View, the men would sigh and say, "The floatin' ledge is at it agin."

The *Baldwin* had longer lines than other stone sloops of her day, and she was designed with a broad bow to dig through the water. Her stern was tapered and caused a sensation among the veteran sloopers of the day. The captain used to say that a "chip would have followed the old *William Hunt* clear to Portland and back, but when the *Baldwin* thrust through the water, everything left her."

The sloop had a neat white and black hull and was easy to spot beating up Ipswich Bay after a load of granite at Bay View wharf. Her construction was unusually heavy, being a stone carrier, and besides a reinforced deck, she had three-inch planking throughout.

Because she carried a loading derrick, the *Baldwin* had a cumbersome masthead. And the huge mainsail, eleven hundred square yards of canvas, was the largest single spread of sail of any vessel afloat between Cape Ann and Boston. It was the pride of the Harris Sail Loft down at the harbor in Gloucester.

When it was time for loading, the sail was triced up about twelve feet at the throat so it wouldn't interfere with the arc of the derrick. The main boom measured eighty-two feet.

When the derrick wasn't being used, it was carried on deck,

but as soon as the sloop slipped alongside the pier where granite lay stacked for loading, the derrick was stepped in an oak block just aft of the ninety-foot mast.

Most loading was done by passing stones hand to hand, if they were paving blocks. Sometimes the blocks were first loaded carefully in a half of an old boiler that resembled a giant scoop or cradle. Then the derrick picked up the entire load to be tipped into the hold where men waited to pick them up and pack them evenly. Two glass tubes were used to check for loading balance—one in the after cabin and one just forward of the mast. As the sloop sank lower and lower in the water at the dock under tons of granite, water rose correspondingly in the measuring tubes. In this way the men kept their load balanced evenly, and knew also exactly how much tonnage had been swung aboard.

The hoisting winch was located forward, and the same engine below decks ran all the lifting apparatus. The eight horsepower boiler could get up to ninety pounds of steam.

The *Albert Baldwin* was a centerboarder, and when she sailed into the wind, down went her centerboard to keep her from sliding sideways.

Bill Daggett of Gloucester, who used to sail with Capt. Poland, recalled with humor some years later that "water never meant much. We'd sail through the water, under it, and then over it."

On the day of the great Portland gale in 1898, Capt. Poland finished loading 200 tons of sea-green granite at the Bay View pier for the run to Maine. As he turned to leave the vessel and pick up the bills of lading, he said to his crew of six, "When I come back, you be all set to go. Have the straps off that foresail and mainsail, and a line aft."

The captain knew the *Baldwin* would make good time. There was just a light air, and the vessel fanned along to Portland. She dropped both anchors before that fateful storm struck in which the steamer *Portland* was lost.

Sometimes Captain Poland brought along his son as cook. His orders were to "keep the coffee hot and make gingerbread."

"What'll I do if something goes wrong?" the anxious youth asked, thinking about baking results.

"See that porthole there? You throw it out and make another batch," was the cryptic advice.

Capt. Poland had skippered the *Henrietta*, a small sloop,

the schooner *J. M. Todd*, the perky sloop *Daniel Webster*, and the sloop *William P. Hunt* for eight years. From 1890 until 1920 he was captain of the *Baldwin*, his special love. He was ninety-one when he died in February 1940, but the *Baldwin* had gone before him—broken up during the 1930s. For years the sloop was tied up at Annisquam, not far from Capt. Poland's home; then she was purchased by a group who intended to make a floating restaurant out of her. They towed her to Smith Cove in Gloucester Harbor, but the business deal fell through, and the *Baldwin* finally met her end as a heap of old timbers under the axes of WPA workers clearing up the harbor.

The *Albert Baldwin* was the last of the famous Cape Ann granite sloops. When she vanished from the harbors along the coast, another piece of maritime history came to a close.



*Photo from the Stebbins Collection, Society for the Preservation of
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Undaunted, Allen picked up Capt. Pittee, hoisted him to his back, and set off to hike in his stockinged feet the two miles to Marblehead town. There he went directly to the police station for help. Two doctors came and examined the injured men. Capt. Pittee was found to have three ribs broken, his shoulder dislocated, and injuries to his face and head from the derrick boom.

As soon as they could manage it that Sunday, the Marblehead Chief of Police drove Allen and the captain home to Rockport in a comfortable carriage.

The Rockport Granite Company sent out their tugboat *H. S. Nichols*, their lighter *West End*, and a diver to locate the wreck and recover the bodies of the two men who were lost. When the *Alfred A.* went down she was on a course with Long Island Light southwest half west, and she sank in about twenty-six fathoms of water. Somewhere down there, not far from Egg Rock today, is a neat pile of paving blocks for some surprised frogman to discover.

John Allen was later awarded a silver medal by the Massachusetts Humane Society.

One of the earliest sloops to load with granite for Boston besides the *Fox*, sometime after 1823, was the *Diamond* that loaded ox carts full of stone at Knowlton's Cove, Rockport, for William J. Torrey Company. In those early years of shipping

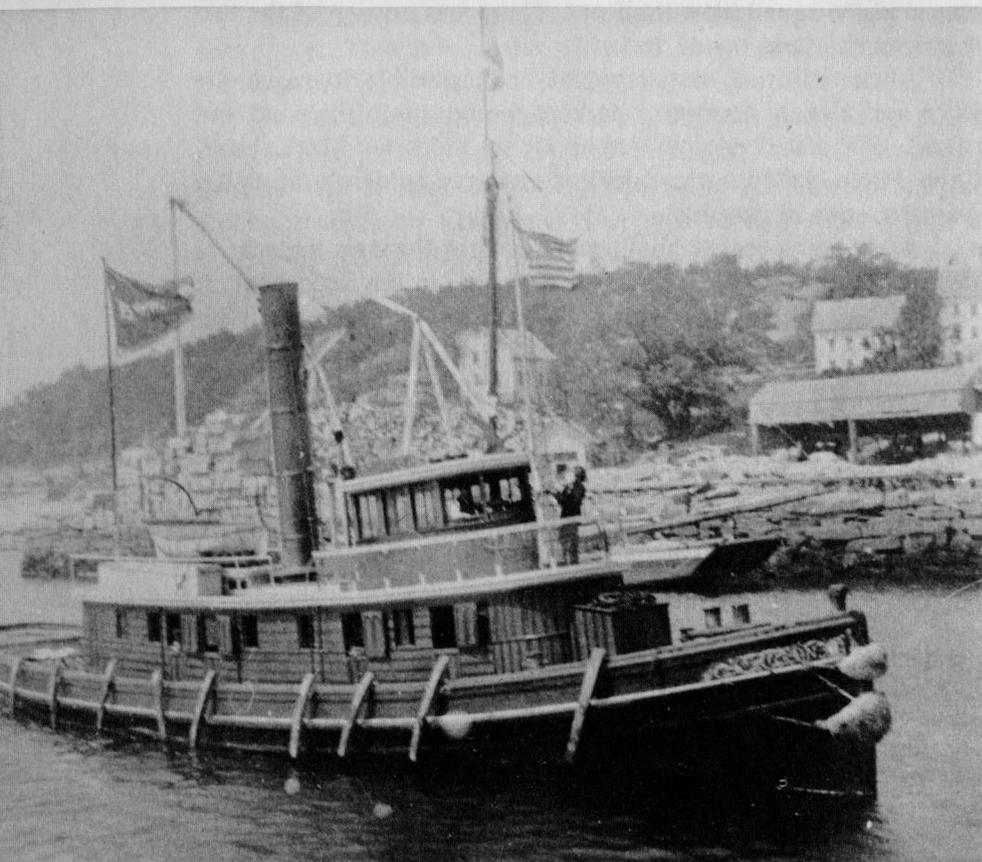
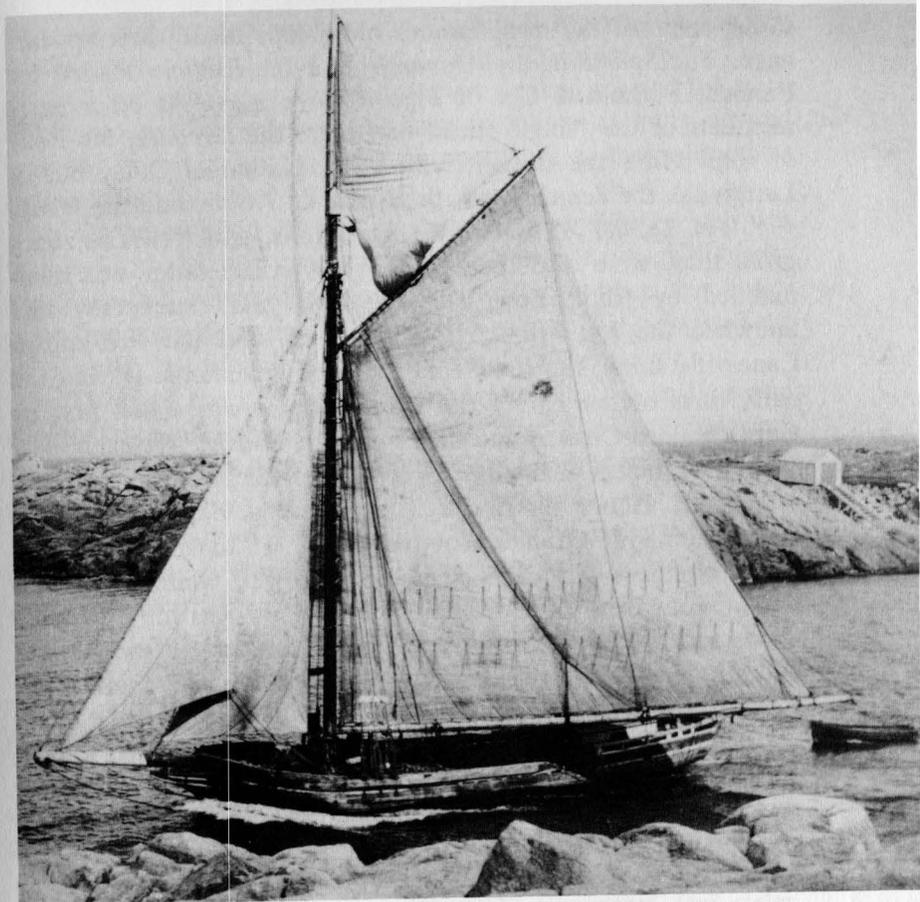


Photo from the Rogers Collection
Tug *H. S. Nichols*, with flags flying in a stiff breeze, heads into the wharf at Rockport.



Sloop loaded with granite passes close to shore at Rockport, circa 1900.

stone, some of the most famous old sloops made their appearance. The *Splendid*, the *Monarch*, and the *Radiant* loaded for Preston, Fernald & Co. of Pigeon Cove in 1853; other early members of the "single stick" fleet were the *Arcadia*, the *Belle of Cape Ann*, the *Casket*, with Capt. Nathaniel Duley out of Lanesville, the *Jennie Lind*, the *Nellie C. Noble*, and the *Whip*.

The *Daniel Webster*, 46.1 gross tons, and *New Era*, 62.5 gross tons, were also launched in 1853. The latter was commanded by Capt. Levi Cleaves. Two years later they had launched the *Ida May*, 63.5 gross tons, and the well-known Lanesville sloop, the *Hard Chance*, 64.6 gross tons. During the early days of her career the *Hard Chance* was sailed first by Capt. Willard Cleaves and then by Capt. Ned M. Webster.

Newspapers of the day reported that the sloop *C. E. Trumbull*, Capt. Henry W. Elwell, 99 gross tons, built in 1870 for the Pigeon Hill Granite Company, had a "harrowing experience" on the night of November 29, 1880, while homeward bound from New Bedford. The sturdy sloop was hit with head winds and a heavy sea off Cape Cod, and although she labored and struggled along under a double-reefed sail, she could make scarcely any headway.

During the early morning hours, a light was sighted to port that the pilot thought was Race Point. The course was at once corrected. But only ten minutes later, with an ominous crunch and shudder, the *Trumbull* struck hard and fast on Peaked Hill Bar, a graveyard for many a ship.

A Coast Guard beach patrol fortunately had seen the sloop snagged by the bar, and they sent up a rocket to let the crew know they were coming out. In less than an hour, while the men agonized about their possible fate in the heavy seas, a surfboat from Station Seven at Provincetown, under command of Capt. David H. Atkins, reached the *Trumbull*.

The seas were running high, so the lifeboat didn't dare go alongside the captive stone sloop. Trying the only plan he thought sensible, Capt. Atkins brought the small boat in under the stern of the *Trumbull*. "Jump for it!" he yelled.

One crew member, Frank E. Elwell of Rockport, jumped into the boat and landed a-straddle the head oarsman's head. Four men, George Caldwell, James Breen, Henry Tarr, and Elwell were taken off the *Trumbull* on that first pass-by and safely landed on the beach.

Then the plucky lifeboat captain again swept his boat into

the surf and headed back to the *Trumbull* to bring in the rest of the crew, Capt. Elwell and the pilot, Theodore Poole.

Closer and closer the lifeboat was worked toward the stern of the sloop while on deck the captain and pilot hung on and watched grimly, ready to jump on command as their shipmates had successfully done.

The small boat was passing over the mainsheet, which was trailing in the water, just as it had done before, when suddenly the *Trumbull* rolled like a sick elephant. At once the heavy main boom swung from one side to the other. This tightened the sheet under the lifeboat and cut it in two like a cleaver.

Three of the surf boat's crew thrashed to the surface and eventually, after a swim of a mile through the seas and surf, reached the beach, but the valiant Capt. Atkins and two surfmen, S. F. Mayo and E. Taylor, were drowned.

It was finally flood tide and Peaked Hill Bar relinquished its grasp on the *Trumbull* so that the sloop, battered but still seaworthy, floated free. From there she was sailed to an anchorage off Chatham by Capt. Elwell and the pilot, still aboard. There they hired three new hands to replace those landed on the beach, and then set out for Boston, undaunted, even though the weather had developed into a driving November snowstorm.

The *Trumbull* sailed for a number of years after that escape from Peaked Hill Bar, but was finally broken up as a derelict at the Rockport Granite Company's dock.

In 1874 the *Jennie Preston*, 66.9 tons, was built at Yarmouth, Maine, for the Rockport Granite Company. Her sister sloop was the ill-fated *Alfred A*. And there was the *America*, a product of the old Salisbury shipyards, which Capt. Jeremiah Pettingill sailed for years. She had a powerful double-head rig that was used during the last of her career. There was also the famous sloop *Screamer*, 64 tons, which F. Hopkinson Smith wrote about his Cape Ann sloop in the novel *Caleb West Master Diver*, published in 1899.* The *Screamer* was eventually lost in a squall broad off Eastern Point while Boston bound.

Each sloop took a crew of four or five men, who hoisted the big sails by hand before hoisting engines were set in. The *John Brooks* was the first to have a mechanical hoist; then the *Hard Chance*, the *New Era*, and the *Belle of Cape Ann*. This lat-

ter sloop sank under Capt. Pittee off Misery Island, only a few miles from where he lost the *Alfred A.*

The captain of the stone sloop *Granite* of Quincy didn't fare so well on an October afternoon in 1858. Loaded with stone out of Rockport, the Boston-bound sloop struck on Yarmouth Bar. The weather was bad and blowing, so rough in fact, that the Sandy Neck lightkeeper couldn't reach her in a boat, although he tried. He had spotted two men on board just before she struck. Her sails were torn to shreds and lay buried in the surf.

On Monday the body of Capt. Solomon Torrey of the *Granite* was washed ashore at Dennis Beach. Torrey had been a veteran of the stone business for sixty years and had operated a quarry business at Rockport. In those days they referred to the business as "carrying on a ledge." William Parker of Rockport was also lost.

In 1863, in October, the sloop *Alexander* was sailing into Boston Harbor when she was run into by the *USS Ticonderoga*, a Navy sailing ship. The little sloop was carrying granite for Beniah Colburn. Presumably the men were rescued, but no more was said about it in the newspapers of the day.

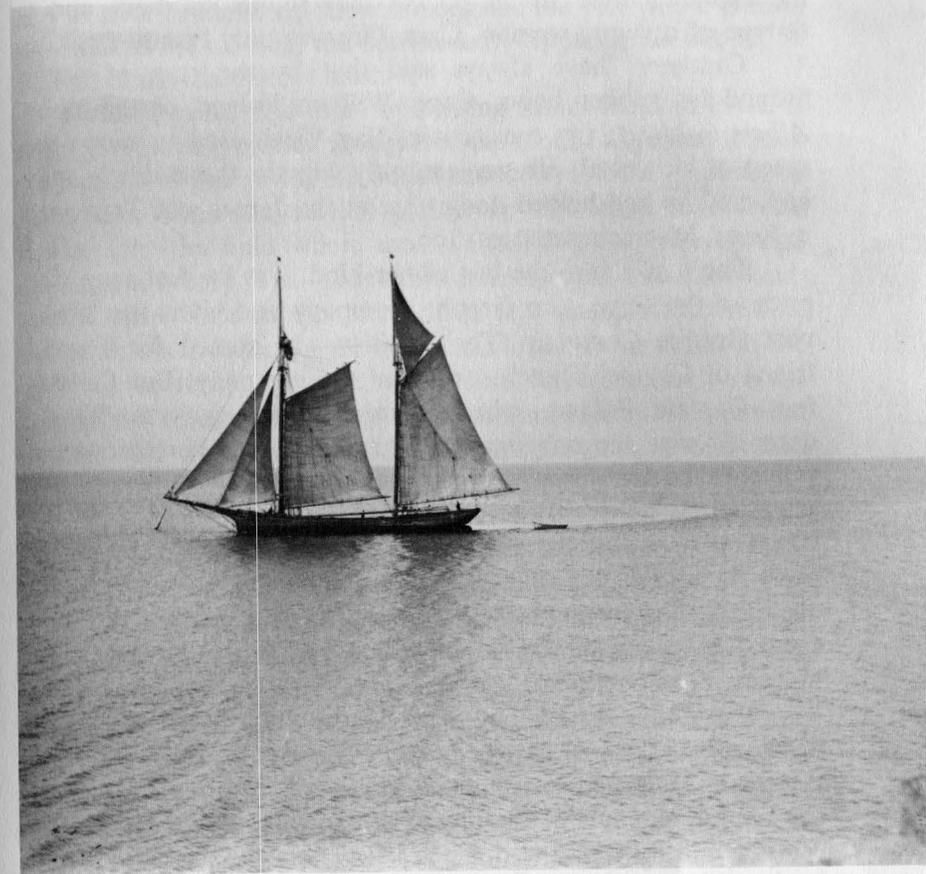
The sloop *Arcadia*, of Rockport, Captain Doyle, went aground off Marblehead Neck on April 29, 1870, and no doubt pounded her aged timbers to splinters.

A patrolman walking his beat along the wharf in Newburyport on August 18, 1895 was shocked to find the sloop *Jumbo* sunk at her mooring, an ominous silence everywhere, and no one about on Balch's Wharf.

The *Jumbo* had arrived at the mouth of the Merrimack River on Saturday afternoon, heavily loaded with stone for the South Jetty. Because conditions were unfavorable for discharging the stone, it was decided to go upriver and moor the sloop at the wharf.

One lucky crew member had left the sloop for the night, but the captain, Stephen Orr, and George Welch, both of Rockport, evidently drowned in their berths. It was supposed that the vessel had grounded on the sloping river bottom and listed so far when the tide ebbed that water silently filled her hold again when the tide rose.

Until the Rockport Granite Company sent a tug across the bay with a diver, the only thing recovered from the vessel was



From the Alexander R. Cheves Collection
Schooner *Multnomah* near the Gap at Lane's Cove, coming in to be loaded for the Cheves Green Granite Co. About 1902.

the captain's coat. In his pocket they found his diary and a tintage of a young woman. Capt. Orr was only twenty-three.

Oldtimers have always said that by the rush of water around his rubber boots, Capt. William Poland of the sloop *Albert Baldwin*, 123 tons, out of Bay View, used to gauge the speed of his vessel. He was the only captain the *Baldwin* ever had, and he had helped design her at the James and Tarr yard in Essex, Massachusetts, in 1890.

The new sloop, the last of her kind, was 86 feet long, the pride of the Cape Ann Granite Company and later, the Rockport Granite Company. The *Baldwin* was named for a good friend of Colonel French, owner of the company. But the six-foot Captain Poland, whose strongest language was "Gosh, darn it!" was the only man who dared to sail her through a yellow-tailed sou'wester with her decks awash and a full cargo of stone below.

Unlike the slower vessels carrying stone up and down the coast, the *Baldwin* could whip along at twelve knots. She was always so heavily loaded with granite blocks that as she was sighted going out of the bay off Bay View, the men would sigh and say, "The floatin' ledge is at it agin."

The *Baldwin* had longer lines than other stone sloops of her day, and she was designed with a broad bow to dig through the water. Her stern was tapered and caused a sensation among the veteran sloopers of the day. The captain used to say that a "chip would have followed the old *William Hunt* clear to Portland and back, but when the *Baldwin* thrust through the water, everything left her."

The sloop had a neat white and black hull and was easy to spot beating up Ipswich Bay after a load of granite at Bay View wharf. Her construction was unusually heavy, being a stone carrier, and besides a reinforced deck, she had three-inch planking throughout.

Because she carried a loading derrick, the *Baldwin* had a cumbersome masthead. And the huge mainsail, eleven hundred square yards of canvas, was the largest single spread of sail of any vessel afloat between Cape Ann and Boston. It was the pride of the Harris Sail Loft down at the harbor in Gloucester.

When it was time for loading, the sail was triced up about twelve feet at the throat so it wouldn't interfere with the arc of the derrick. The main boom measured eighty-two feet.

When the derrick wasn't being used, it was carried on deck,

but as soon as the sloop slipped alongside the pier where granite lay stacked for loading, the derrick was stepped in an oak block just aft of the ninety-foot mast.

Most loading was done by passing stones hand to hand, if they were paving blocks. Sometimes the blocks were first loaded carefully in a half of an old boiler that resembled a giant scoop or cradle. Then the derrick picked up the entire load to be tipped into the hold where men waited to pick them up and pack them evenly. Two glass tubes were used to check for loading balance—one in the after cabin and one just forward of the mast. As the sloop sank lower and lower in the water at the dock under tons of granite, water rose correspondingly in the measuring tubes. In this way the men kept their load balanced evenly, and knew also exactly how much tonnage had been swung aboard.

The hoisting winch was located forward, and the same engine below decks ran all the lifting apparatus. The eight horsepower boiler could get up to ninety pounds of steam.

The *Albert Baldwin* was a centerboarder, and when she sailed into the wind, down went her centerboard to keep her from sliding sideways.

Bill Daggett of Gloucester, who used to sail with Capt. Poland, recalled with humor some years later that "water never meant much. We'd sail through the water, under it, and then over it."

On the day of the great Portland gale in 1898, Capt. Poland finished loading 200 tons of sea-green granite at the Bay View pier for the run to Maine. As he turned to leave the vessel and pick up the bills of lading, he said to his crew of six, "When I come back, you be all set to go. Have the straps off that foresail and mainsail, and a line aft."

The captain knew the *Baldwin* would make good time. There was just a light air, and the vessel fanned along to Portland. She dropped both anchors before that fateful storm struck in which the steamer *Portland* was lost.

Sometimes Captain Poland brought along his son as cook. His orders were to "keep the coffee hot and make gingerbread."

"What'll I do if something goes wrong?" the anxious youth asked, thinking about baking results.

"See that porthole there? You throw it out and make another batch," was the cryptic advice.

Capt. Poland had skippered the *Henrietta*, a small sloop,

the schooner *J. M. Todd*, the perky sloop *Daniel Webster*, and the sloop *William P. Hunt* for eight years. From 1890 until 1920 he was captain of the *Baldwin*, his special love. He was ninety-one when he died in February 1940, but the *Baldwin* had gone before him—broken up during the 1930s. For years the sloop was tied up at Annisquam, not far from Capt. Poland's home; then she was purchased by a group who intended to make a floating restaurant out of her. They towed her to Smith Cove in Gloucester Harbor, but the business deal fell through, and the *Baldwin* finally met her end as a heap of old timbers under the axes of WPA workers clearing up the harbor.

The *Albert Baldwin* was the last of the famous Cape Ann granite sloops. When she vanished from the harbors along the coast, another piece of maritime history came to a close.

IV

It was the wonder of the year 1848 when the small two-man motion run by Richard Ricker and Kilby P. Sargent actually produced enough granite blocks to build the Little Creek crossing—total cost two hundred fifty dollars. This is the stonework that supports Washington Street as it sweeps through Bay View hollow.

Despite dire predictions that the "stone would run out," the two men gradually dug their quarry deeper and wider, carefully siphoning off the water that formed in the bottom from hidden springs. Steam pumps hadn't been invented.

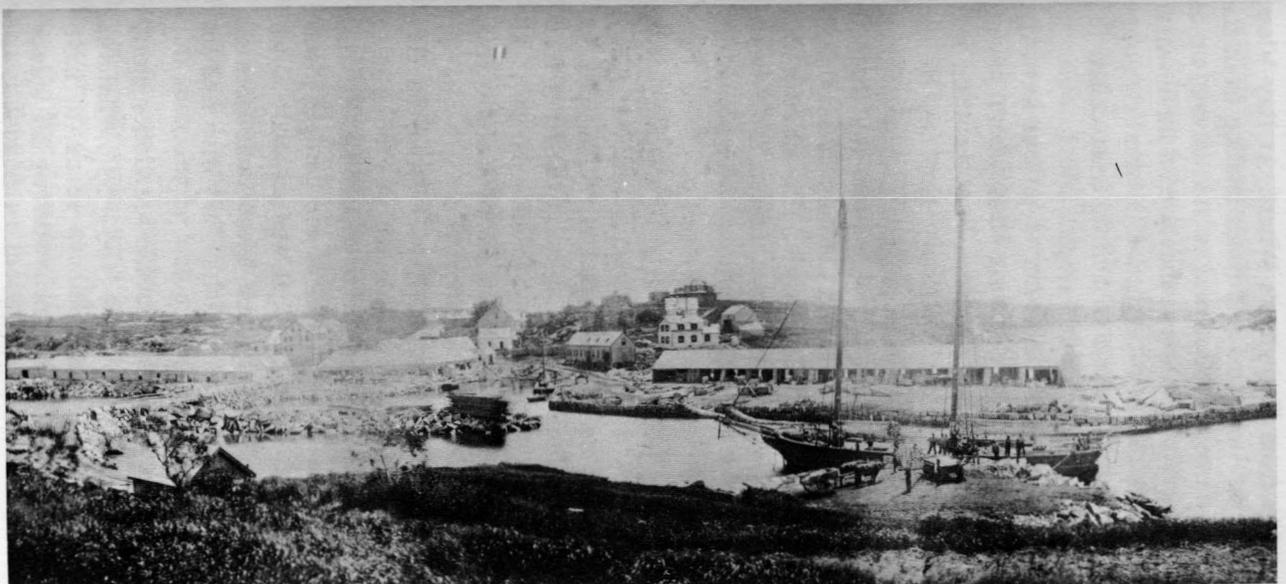
No one dreamed that the little paving block and foundation stone motion would become known all over New England as Deep Pit (later Old Pit)—famous for the medium gray granite it produced. Out of its depths were hoisted all the stone blocks for the old Boston post office and another post office built at the same time in Baltimore. The granite in the Longfellow Bridge across the Charles River in Cambridge was also quarried from there.

The first man to see a great granite future for Hodgkins Cove was William Torrey, a Quincy quarry operator who lived at Pigeon Cove and had a quarry there, shipping out of Knowlton's Wharf in the 1820s. He had also tried quarrying at Folly Cove, where capstone was needed for breakwater and wharf contracts. Then he opened a bigger quarry in Rockport and expanded into Hodgkins Cove, now Bay View. He went higher into the hills than the men who ran motions at that time, and one of his quarries is in upper Revere Street, at its highest point before it ducks down and winds to the farm at the end.

Torrey encouraged his fellow quarry operator, Beniah Colburn, also of Quincy, to get into the stone business. In 1827 Colburn formed a partnership with Ezra Eames of Rockport



Another view of Old Pit, taken about 1880. Note banistered stairway to bottom of the pit. A ladder leads to staging where men are to work on stone. Old derrick cables are made of iron sections.



Beniah Colburn quarry property at Bay View before 1870, the earliest known photo of this area. Vernon's wharf is in the foreground. Duck's Nest at left.

and also began to ship from Knowlton's Wharf. At Bay View, they began to enlarge the stoneyard and roads leading from the cove to the hills. One, named for Colburn, twisted its way up to the top of nearby Mount Misery. At first they used a small wharf where the fishermen landed their catches. The smaller sloops were brought up high into the cove to a little inlet called the Duck's Nest. Colburn later filled in this area.

Along the new wharf that had begun to jut out from the Duck's Nest, Colburn built a long cutting shed where paving cutters worked in sections at their bunkers. Fancy cutting was done in a nearby shed to save unnecessary handling of the finished stone.

Ox carts rumbled from the quarries, stopping with their granite blocks at any designated part of the long cutting shed, or continuing on out to the pier for loading. The ox barn was up the hill a little way toward Gloucester, and near it was a small shed where the men carved the statue of Myles Standish that stands in Duxbury, Massachusetts. In front of the ox barn the quarry blacksmith, George Prescott, lived in a white house.

A boardinghouse for the men was close by the stoneyard, along with the private dwelling of Dr. Elmer Berry. He became famous in Bay View for being the first to build his front door on what was then a dusty, gray road through the stoneyard. All the village thought he should have faced South Kilby Street, which was being built up after the Civil War.

In the basement of the old boardinghouse was the Bay View post office where Charles Bowtell handed out the mail to those who called for it or sent messengers to pick it up.

Another boardinghouse for the men of the company was located at Mt. Locust Place, Plum Cove. It was so sandy down there that the boarders had to empty their shoes each morning before they could start work at the quarry. They also had an icehouse, and later on a bowling alley.

Colburn was the first on Cape Ann to ship foundation stone to San Francisco around Cape Horn in 1852-53. Whatever came up new in paving-block sizes, Colburn seems to have foreseen its need and already had his men working all winter on that exact size.

He kept adding to his stoneyard, filling in and building sheds until his death. Then the quarry was operated by William J. Torrey and his son William, until February 2, 1866, when it was advertised for sale in the *Cape Ann Weekly Advertiser*:

The quarries, wharves, shops, sheds, dwellinghouse and about 60 acres of land known as B. Colburn's property is offered for sale. There is plenty of the best quality stone, and ample wharf and shed room, and other facilities for carrying on an extensive business: also stone carriages, derricks, stone tools, hay scales, etc. This is well worthy of the attention of persons wishing to engage in the business. Apply to or address Wm. J. Torrey, Rockport, Mass.

After the Civil War, in 1865, General Benjamin "Silver Spoons" Butler returned to Bay View to spend a summer tenting on the shore not far from the cove. He had already camped there in 1863, coming from his home in Lowell with his two boys, and that year had acquired land on which he planned to build a house.

It was General Butler who had named the village "Bay View" because he thought the sunsets over Ipswich Bay were certainly equal to anything in the Bay of Naples.

He became interested in the business of quarrying when he discovered he needed many loads of foundation stone to begin his house. Actually, he used Bay View gray granite together with a pink shade of granite from Wolf Hill at Gloucester.

General Butler's former aide and provost marshal in New Orleans, Colonel Jonas H. French, was looking for something to do, so the General prodded him into the quarry business.

Colonel French headed up the Cape Ann Granite Company, which the April 1867 edition of the *Cape Ann Weekly Advertiser* said was being organized. The General provided financial backing.

Colonel French always wore his wide-brimmed hat and a white suit whenever he went to the quarry. He was well regarded by his men, for he was one who would step right into an argument or help a foreman solve a lifting job if he could. He was a generous person and interested himself in Bay View affairs. He supported the new Methodist Church, and he petitioned to keep the fire department steamer in the Bay View engine barn when it looked as though it would be moved up to the city proper.

To see the Colonel leaving his estate, Rocklawn, next to General Butler's, was an unforgettable sight. He travelled in a light, fast carriage with swift horses; a bugler up front beside the driver played different calls as the carriage came and went. The



Blood Ledge, named for its owner, was the most awesome quarry on Cape Ann. It is now water-filled.

newspaper several years later mentioned that Colonel French was the handsomest man this side of Boston.

Although he was involved with the granite company, General Butler gave his attention to running for Congress. Still, it was his astute advice that sent Colonel French to call upon the widow of his bookkeeper, Joseph Blood, to see if he could buy the land they owned on which the Great Rock stood. This mammoth ledge, located much farther up into the woods beyond Old Pit, had been worked by Blood in the 1840s, but he lacked the money to develop it. The Colonel bought the ledge successfully, but one descendant of Joseph Blood always claimed that General Butler had sent French to “do the widow out of her ledge.”

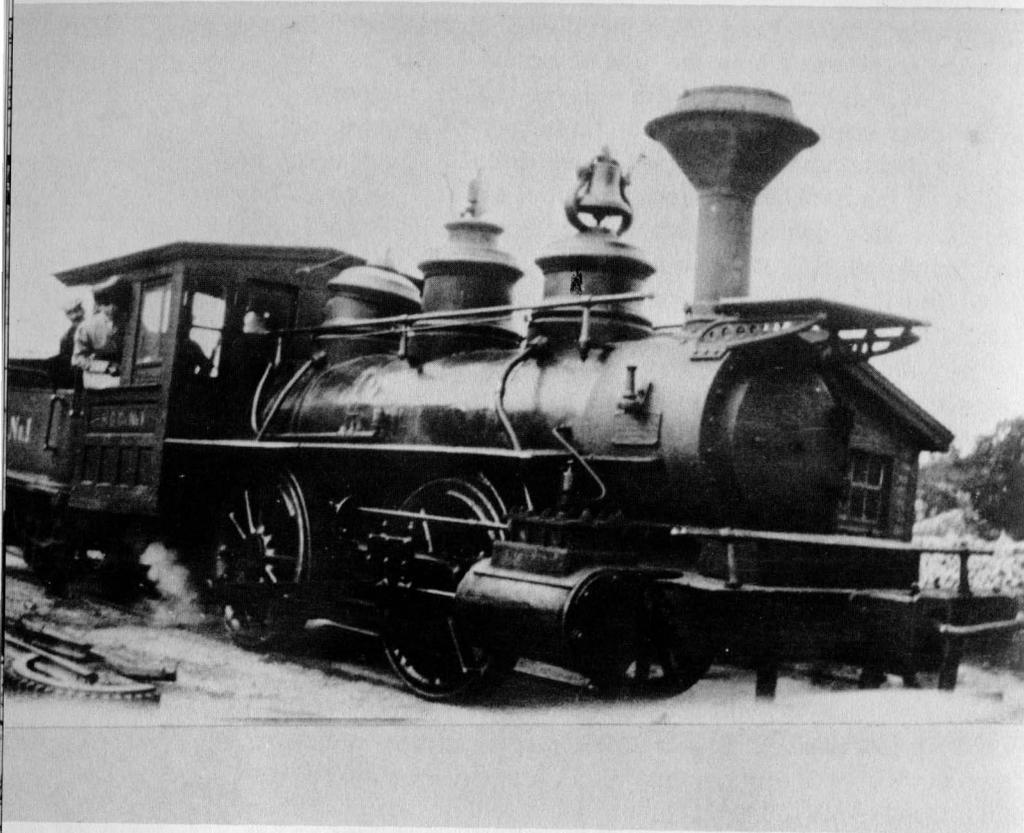
Blood Ledge quarry, at first producing stone from above the level of the ground, turned out to be beyond Colonel French’s wildest dreams. The granite had few seams, almost no knots—imperfections in the stone—and huge slabs could be blasted free without shattering. Waste rock consigned to the grout pile was cut to a minimum. The color of the granite was an olive green, especially when it was wet or polished. It was distinctively marked with black. Before many years passed, it could be identified as Blood Ledge granite in any stonework, from paving blocks and foundation stone to monument work and carved pieces. The quarry, almost a mile wide, is about two hundred twenty-five feet down to the bottom. Old Pit, its predecessor in fame, is only two hundred feet deep.

Bay Viewers enjoyed talking about the General and how smart he really was “whether you liked him or you didn’t.” Sherm Carter, the meat man, used to take his horse and wagon up the circular road to General Butler’s house regularly. He’d drive up close to the house and go in, leaving the back of the wagon open on irons. One day, one of the General’s dogs ran off with a big roast from the wagon.

Sherm couldn’t catch the dog, so he hastily ran back to the house and said, “Now, General Butler, suppose you had a wagon and peddled meat as I am doing and went into a certain house. While you were gone the man’s dog took a leg of meat right out of the cart. What would you have done?”

“Well, I’d make the man pay for it, or get him hauled into court.”

“That’s pretty good advice at that,” said Sherm. “Well, it was your dog that took that meat.”



"Polyphemus," locomotive used at Bay View quarry from 1879 to the last days of 1930. Engine was built by Hinkley Locomotive Works.

"Oh, it was. How much was the meat worth?"

"Five dollars, and I expect to be paid for it."

"Ho!" retorted the General. "You just asked a lawyer's advice and it just happens that the fee is five dollars."

No one could ever beat General Butler for originality, either. A few minutes before he gave a political speech in opposition to some remarks, he would suck a fresh lemon so that his face would register an acid, disapproving expression from the podium.

Colonel French immediately decided that his quarry company, the Cape Ann Granite Company, was to be the most modern one on the coast. He had a railroad built from Blood Ledge down past Old Pit, through the stoneyards out onto the wharf. To haul the stonecars, he ordered a small locomotive, which he must have named Polyphemus No. 1. There seems to be no record of this particular engine other than that it was only half as light as Polyphemus No. 2, a 20-ton engine that came later.

On September 16, 1870 the newspaper announced that the Cape Ann Granite Company had just completed a new railroad. The engine and rolling stock had been received and on Monday the road would be formally opened.

That Monday, a bright and sunny day, a fleet of wagons gathered at Gloucester depot to bring down the three hundred guests who were coming to General Butler's celebration of the opening of the new railroad. They had arrived on a special train from Boston about 10 A.M. and on coming to Bay View were greeted by the General and then by Colonel French. Large tents had been put up in front of Butler's house on the hill, and here everyone was served lunch. Then they marched like a civilian army down over the hill to the dusty gray stoneyards. The Colonel had a program of granite polishing and stone finishing to show them; then they were to ride the quarry train.

They were taken in groups to the quarry, riding in the flat stonecars, on which safety railings had been set. There they saw at Old Pit the "immense beds of granite," heard the men hammering and drilling, and then stood at a safe distance while black powder blasting went on.

Next they returned to the General's house for a clambake. Dignitaries made speeches, led off, of course, by the General. Then a dory race was run out in the bay. Seven dories started from the yacht *Blanche*, anchored off the point to a stake boat

half a mile away. Three men won ten dollars, five dollars, and two dollars. They were Abram O. Lane, George E. Robinson, and Jabez Marchant.

Youngsters on school vacation in February 1879 had a real holiday despite the cold as they gathered down at the Cape Ann Granite Company pier to see the barge *Plain Jane* brought in by a Boston tugboat. Its deck cargo was a locomotive and tender, shiny bright and new, intended for the company's expanded quarry railroad.

Jack Fuge of Bay View said once that he was one of those boys watching as the locomotive was taken off in sections. They lifted off the tender, then the boiler, and set them right on the track. Fuge grew up to work in the quarries and at one time was a fireman on the engine. He never forgot how her polished brass fixtures and the bell gleamed.

The locomotive, named Polyphemus No. 2, was made at the Hinckley Locomotive Works in Boston. Diameter of the cylinders was thirteen inches; the driver, four feet; stroke, twenty-two inches; boiler, forty-two inches. The engine measured thirty feet in all, including the tender. According to the newspaper report, the new engine was a 20-ton design.

Sam Day was named engineer of the new Polyphemus, and it was announced on Friday, February 28, 1879, that the enlarged railroad would be operating that following Thursday. Workmen on the derricks loading cars of stone for the locomotive to haul away learned to be wary of Sam Day when he slammed the engine into the cars with a bang and briskly coupled or uncoupled cars, charging back and forth on the track with little warning. Those days, it was said that Sam was in a bad mood.

A man named Slater Butler, who was a flagman at the crossing over Washington Street, kept a record of how many times the Polyphemus pulled cars from and to the quarry during the year beginning January 1, 1882. He said the engine crossed 3,378 times and carried 35,000 tons of granite. It made the most trips in August and only thirteen trips in March. "Oliver Griffin assisted the engineer."

By 1880 the little engine chugged its way dozens of times a day up the track alongside Old Pit, or rumbled along through the low swampy side of the hill until it suddenly emerged on a level where a long row of paving cutters' bunkers stood. There they threw a switch and the engineer sent the Polyphemus coast-

ing into the area with the cars moving smoothly behind, loaded with stock for the bunkers.

A fatal accident occurred on the quarry railroad in July 1895 when Fred Linquist, a "Finlander" was killed while loading paving at the railroad. His legs were so badly injured, that he was taken as fast as possible to the Massachusetts General Hospital in Boston, but it was no use.

Once in a while, the locomotive needed repairs, even though it was said that when Maurice Mahony was the engineer, he could take it apart in little pieces and put it back together himself. But sometimes the flange of the wheels had to be worked on so they would fit tighter to the railroad track. During these periods, the stonecars were drawn from the quarry to the wharf by horses. It seems to have been the only time horses were used at this quarry.

Many old-timers who as children picked blueberries in the summertime along the dusty track recall the thrill they always had when they heard the locomotive whistle and then the engine came into sight, chuffing and puffing smoke as it pulled one or two flatcars of big stone just quarried. The engineer always waved and the brakeman lifted his oilcan in salute as they rolled by.



Photo courtesy Society for the Preservation of New England Antiquities
Boston Post Office built entirely of Bay View granite furnished by the
Cape Ann Granite Co., beginning in 1869.

V

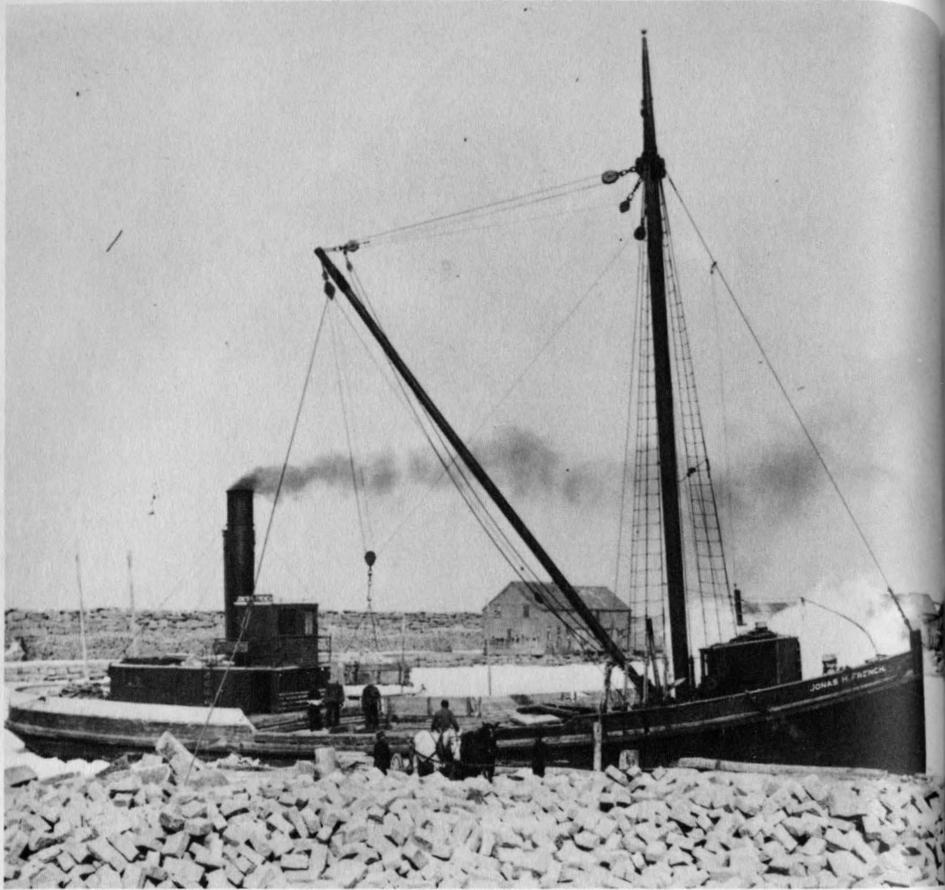
Bay View people were inclined to say a few kind words about General Butler when they discovered that the local company had the contract for building not just the new post office and sub-treasury building in Boston, but the one in Baltimore as well.

Colonel French hired extra men to keep the quarrying and cutting going as they started on the Boston post office contract in 1869. The building, to be regarded as the finest public building in New England, was visited by General Ulysses S. and Mrs. Grant during a cornerstone ceremony on October 16, 1871. The walls on the Devonshire Street front were already up.

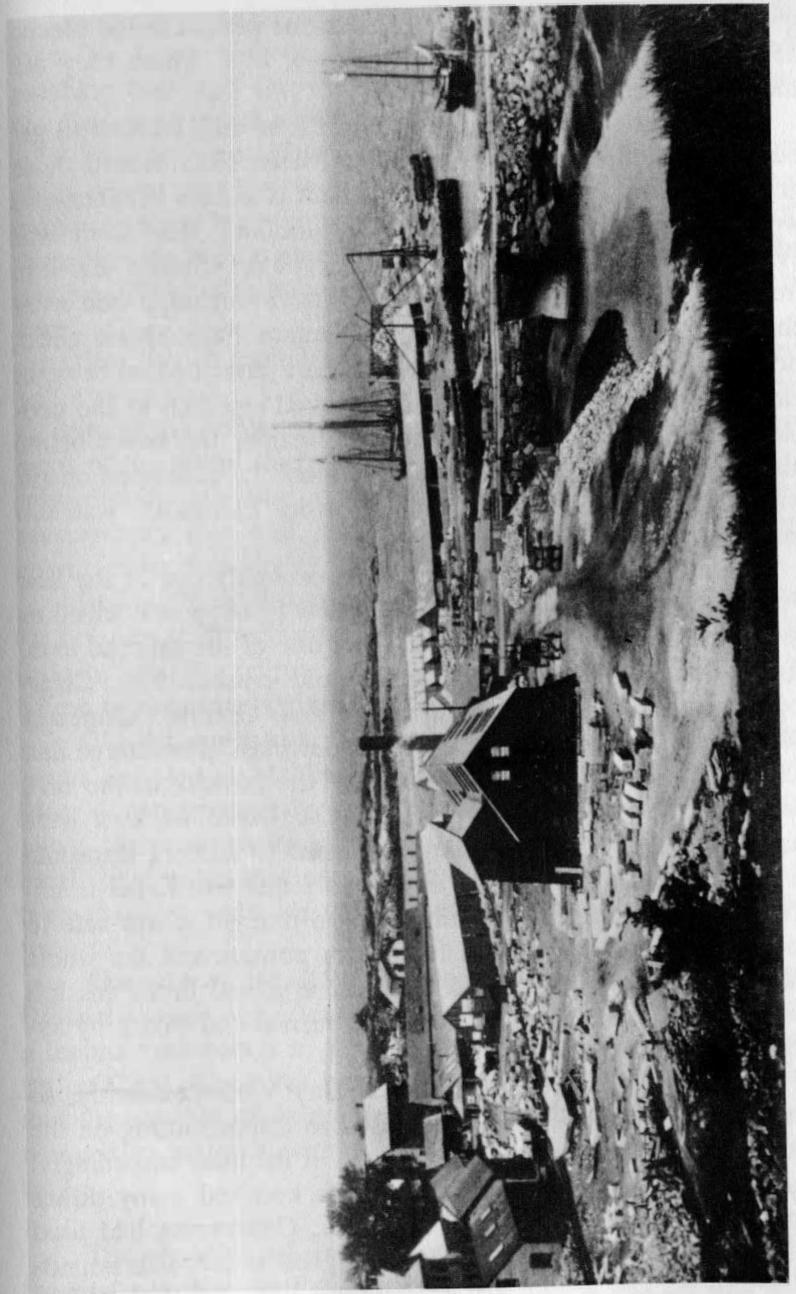
An enterprising man named David Dennison, who worked as a patternmaker for the Cape Ann Granite Company, "did" all the patterns, the designs of stone needed for any particular job, particularly for the Boston and Baltimore post offices. He had given in to the spell of adventure and gone to California about 1849-50 but had come back and taken up patternmaking where he had left off. For years he worked at a high desk in a small building to the left of the stone sheds. In his spare time he invented a lathe for turning hammer handles. So he supplied the company and many other quarries with all the hammer handles they could use.

After the Great Fire of November 1872 in Boston, it was discovered that the huge granite post office had actually stopped the fire in that area, although the Milk Street walls needed extensive repair. Granite men really boasted about this, even though they knew many other granite buildings were lost in that fire.

But in 1929 the building was pronounced obsolete, and it was torn down to become truckloads of fill in the Charles River when North Station was built. They did save some of the Daniel Chester French figures that had been cut in 1882. Two



Lighter *Jonas H. French* loading paving blocks at Lane's Cove, about 1906.



A view of the piers and stoneyard of the Cape Ann Granite Co., Bay View, seen from Mt. Misery about 1880.

groups of sculpture were mounted on stone pedestals and placed near the birdhouse at the Franklin Park Zoo, where they are today.

Many accidents occurred in Old Pit as men worked to get out the granite for the post office contracts. They moved those great stones by an aerial lift arrangement of cables between two wooden towers that they called a "blondin." The term was evidently in honor of the French acrobat, Charles Blondin (real name Jean Francois Gravelet). The Frenchman had nonchalantly walked across a rope at Niagara Falls about 1860, stopping halfway to make an omelette on a stove he had brought along on his back. He lowered the cooked egg dish to the people on the *Maid of the Mist* tourist steamer far down below him. Then, picking up the stove once more, he continued on his way across the rope to the opposite side. Thousands watched him, their mouths open in disbelief.

A man named Octave Marcelles, probably one of the first French Canadians who came to Bay View in 1879, was killed as he helped unload blocks of stone from one of the railroad cars. Somehow it slipped from its chains and crushed him. Christopher Amazeen, foreman at the Cape Ann Granite Company's Old Pit, was severely burned by a powder blast. The charge had gone off prematurely, igniting not just the powder in the drill holes, but the can he held in his hand. Other workers were burned as well. The same thing happened to Samuel Hanscom in 1878. He was drilling out an old hole that had failed to explode. It had water in it all night, so he thought it was safe to go ahead. Somehow a spark found dry powder and the whole ledge blew. Hanscom injured his right arm and broke his left as well. All the men around him were burned and struck by flying stone fragments.

Blasting at the quarries rocked Bay View constantly, so much so that housewives became used to dishes rattling on the closet shelves. They judged the strength of the blast accordingly. But on June 27, 1879, three big blasts knocked many dishes right out of their slots and broke them. Quarrymen had used sixteen kegs of black powder that weighed twenty-five pounds each and packed it into six twenty-foot 2-1/2 inch holes. This blast was another exhibit of what the new steam drill could do, and also how easy it was to set off a charge with the new galvanic battery. That same day, Frank Allen, who worked the steam drill, had his feet badly scalded by escaping steam.

A freak accident occurred in 1875, in October, when Gilman W. Berry was tending fall. Suddenly, the rope parted, catching him and throwing him twenty-five feet into the pit. He died as he struck a pile of stone chips.

The Cape Ann Granite Company continued to build more office space; in 1875 they were working on a storehouse that measured forty by twenty-two feet. Stone sheds were added to those already on the pier and more were built at the rim of the quarries. They also built an addition to their boardinghouse in 1876.

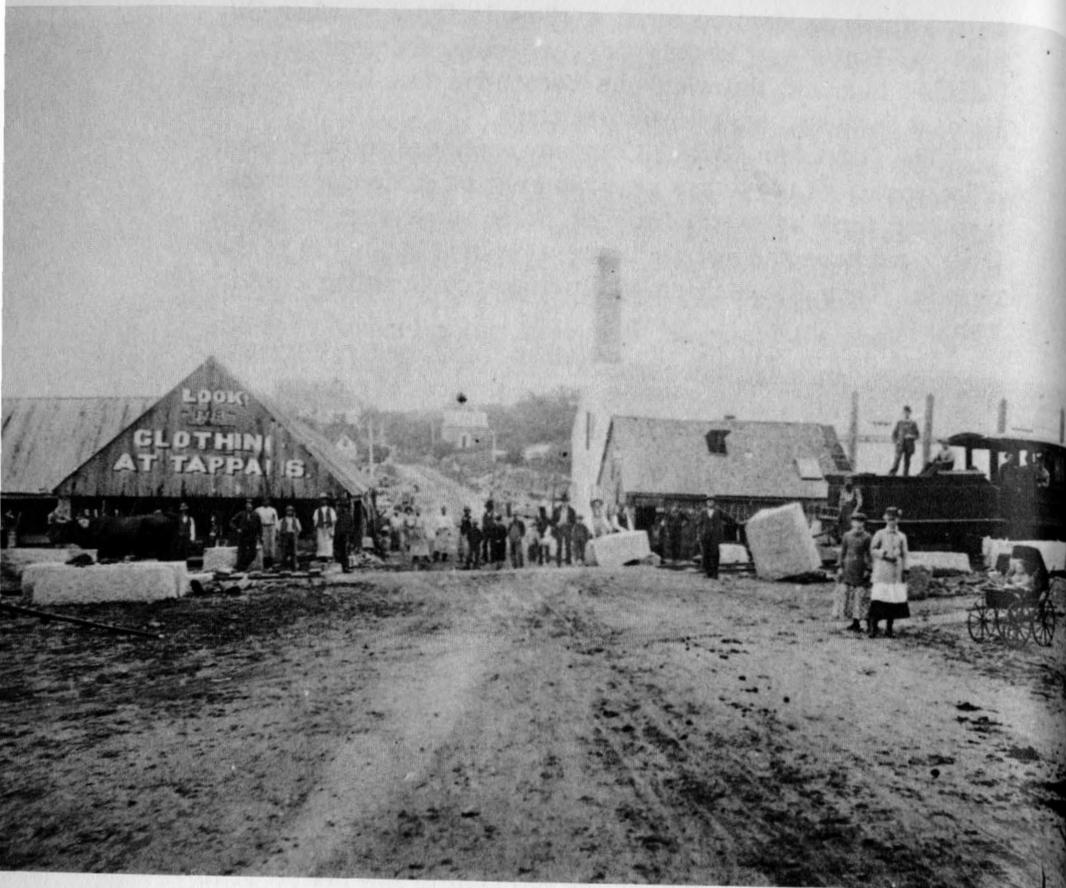
One day in January 1878, Nathan Cook, quarry engineer, had a close shave. The hoisting engine slipped its gear and the velocity of the drum caused the main cogwheel to burst. A fragment of the wheel shot out and punctured a hole in the boiler. Immediately, scalding steam jetted out. Luckily, Cook and several men who had just been enjoying the warmth of the engine room, had already returned to the quarry.

In March 1878 it was announced that a new 8-ton engine for hoisting at Blood Ledge was being set up. Six horses brought it down from the railroad at Gloucester. This new engine was to be run by the same Nathan Cook.

Old Pit continued to surprise its operators by producing larger and better blocks of granite, the more they quarried. Most of the upper ledges were fragmentized, but on June 27, 1871, using seven kegs of powder, the company loosened a block of granite that was one hundred twenty-two feet long, forty-five feet wide and thirty feet deep, and weighed 14,000 tons.

The size of the stone "started" that day was the record Colonel French was after, and it brought him the same pleasure a record tuna brings to a sport fisherman. Each quarry operator on Cape Ann noted any competitor's blast and tried to predict the amount of workable stone it would produce. Then he planned to better it with a blast of his own in the immediate future.

The one hundred sixteen-foot monument to Myles Standish, the first commissioned military captain of the Colonies, stands today at Duxbury, Massachusetts. It was cut in 1871-72 in the Bay View shed of the Cape Ann Granite Company, but they used pink-tinted granite from the Wass quarry in Maine, which they owned. This was probably the first statue of granite the



Washington Street crossing at Bay View, Cape Ann Granite Co., looking northeast toward the Methodist Church. Locomotive "Polyphemus" is on the right.



Photo courtesy Richard Knight
Old carving shop at Bay View, taken March 24, 1880, showing H. Bass, R. Williams, and W. Williams, of the Cape Ann Granite Co.



Myles Standish Monument at Duxbury, Massachusetts, was cut at Bay View wharf by the Cape Ann Granite Co. from Maine granite.

company had attempted. Even today, most statues are bronze on a granite base.

The fourteen-foot statue for the top of the monument, designed by S. J. O'Kelly, dwarfed the men who chipped on the stone, carefully working according to their calculations from a five-foot plaster model. (The plaster model was saved for over fifty years in a bank vault on Main Street in Gloucester, but it eventually fell apart and was taken to the dump.)

Special scaffolding was built around the monument as the stone carvers worked, and the cutting was done in a shed especially built for the project. This was to save any extra handling. After the carving was completed, the scaffolding was removed, and finally, when the statue was completed, the sides of the building and the shelter were taken down to reveal it. A general open house was held at the cutting yards one Sunday afternoon before the statue was to be shipped by boat to Duxbury.

Then it was the carpenters' turn once more to encase the granite figure in a protective covering of lumber—boxing it in so it could be handled without damage by the derrick on the wharf. Oxen dragged it on a low wagon down to the waiting sloop, where it was loaded as deck cargo and lashed down. On arrival at Duxbury, the statue was once more picked up by a derrick and lowered onto a low wagon called a "drag," and oxen pulled it up Captain's Hill to the monument site.

The hill was "arrayed in bunting" and covered with people and tents on October 7, 1872 when the cornerstone was laid for the Duxbury monument. A salute was fired by Baxter's Battery, a big clambake was held in a food tent for seven hundred people, and there were speeches. During the ceremonies, General Butler managed to hoist a flag to one of the derricks, although everything was difficult to see, for a strong wind whipped all the loose, dusty soil into everyone's eyes. The reporter for the *Boston Journal* said brunettes became blondes in minutes and that being in the flying dust was like being caught in a flour mill.

When the monument was built to about seventy feet, money ran out, and it stood as it was for a long time. It was 1889 before the outside was finished, containing the stones and names of all of the New England States. Then the granite statue of Myles Standish was placed on the top; the interior was completed with its iron stairway, bronze doors, and ornamental windows; but it was 1898 before it was pronounced "done."

Poor Myles Standish's statue had a rough time of it later



Hauling step, still in the rough, for Baptist Church, Gloucester, seven miles away from the Cape Ann Granite Co., in 1870. Picture taken near Annisquam Village church. Colonel Jonas H. French, center.

on, for in the 1920s a bolt of lightning decapitated it. The head was so badly damaged that it had to be duplicated. It is said it took two sessions of Legislature to get the appropriation for repairs.

There weren't many chances for the Cape Ann Granite Company to make shipments overland, but in May 1870, they shipped out the largest single block of granite they had tried to move anywhere up to that time. It was destined for the front step of the First Baptist Church in Gloucester, and was drawn by fifteen yoke of oxen. One of the earliest pictures of this venture shows the oxen rounding a hill in Annisquam, drawing a low wagon through the village. The eighteen-foot stone, seven feet wide, is on it, and the men stand by, watching the load carefully. Each driver tends his own oxen.

Colonel French personally superintended the hauling of the granite step. Yokes of oxen were continually switched from the front to the rear to act as brakes as the heavy load careened down some of those steep hills on the way to town. Once they had wound down Meetinghouse Hill in Riverdale, they thought the trip would be a fairly simple thing from then on, but on checking the wooden bridge at the mills, they found it had to be shored up with additional timbers before they dared to cross it.

From May 27 to June 15 the granite step moved from the quarry to the church, and on the fifteenth, a Wednesday, the stone was at last sighted proceeding down Pleasant Street to its destination. Lifting shears had been erected over the step site at the church, and the big stone was pulled off and set into position.

That step stayed in its bed until August 1966 when once again it was taken out by building it up on jacks and sliding it onto a flatbed trailer. George Hagstrom, assisted by Gardner Lane of Beverly, formerly of Bay View, and Jim Currier, inched the granite slab out by using planking and 15-ton jacks until they could pull it squarely and firmly onto the trailer. Then it was set down at the base of the path leading to the Fitz Hugh Lane house at the Harbor Park on Rogers Street, the preservation of the step being the idea of the Cape Ann Historical Association.

Perhaps the largest chunk of granite ever to be taken from the Blood Ledge quarry during the days of the Cape Ann Granite Company was the stone for the platform base of the

General Winfield Scott monument, which was to be shipped to Washington, D.C.

In 1872 it was announced to the public that the pedestal alone when finished would be twenty-seven feet long, seventeen feet wide, three feet thick, and would weigh 130 tons. Granite weighs 165 pounds to the cubic foot. Another stone would be eighty feet long and several others thirty to forty feet.

The blocks to make up these pieces were quarried in the rough, that is allowance in size was made for finishing later. Then they were dragged by chains and levers to a flatcar for the trip to the wharf.

By the time the men finished working on the stones, they weighed 119 tons, and the three-masted schooner, the *Jonas H. French*, was chosen to take them to Washington.

On November 10, 1873, the schooner finally left Bay View, with Capt. William A. Harrington in command. Little did he know what he was going to be in for before he saw land again.

Seven days out, off Barnegat, New Jersey, the winds mounted to a heavy blow, so heavy that the captain couldn't run into it, but was forced to run before it—clear out to sea. Immediately, the crew became apprehensive, casting looks at one elephantine chunk of the granite weighing down their vessel, covering most of the deck like a huge ledge from the shore itself.

It blew steadily for five days, and the schooner still ran before the wind, heaving and groaning in the heavy seas, while the crew worried and worried about the heavy stones on deck. They begged the captain to let them take an axe to their chains and slide the stones overboard before all was lost.

Capt. Harrington had a feeling things would come out all right—at least he convinced his crew that he thought so, and each time they came to him with their doubts, he talked them around to his point of view.

His faith was justified: with a sudden rise in the barometer, the wind began to abate. As soon as he could, Harrington resumed course for Washington and arrived on December 5, just twenty-five days out of Bay View. During the windstorm they had run nine hundred miles off their course.

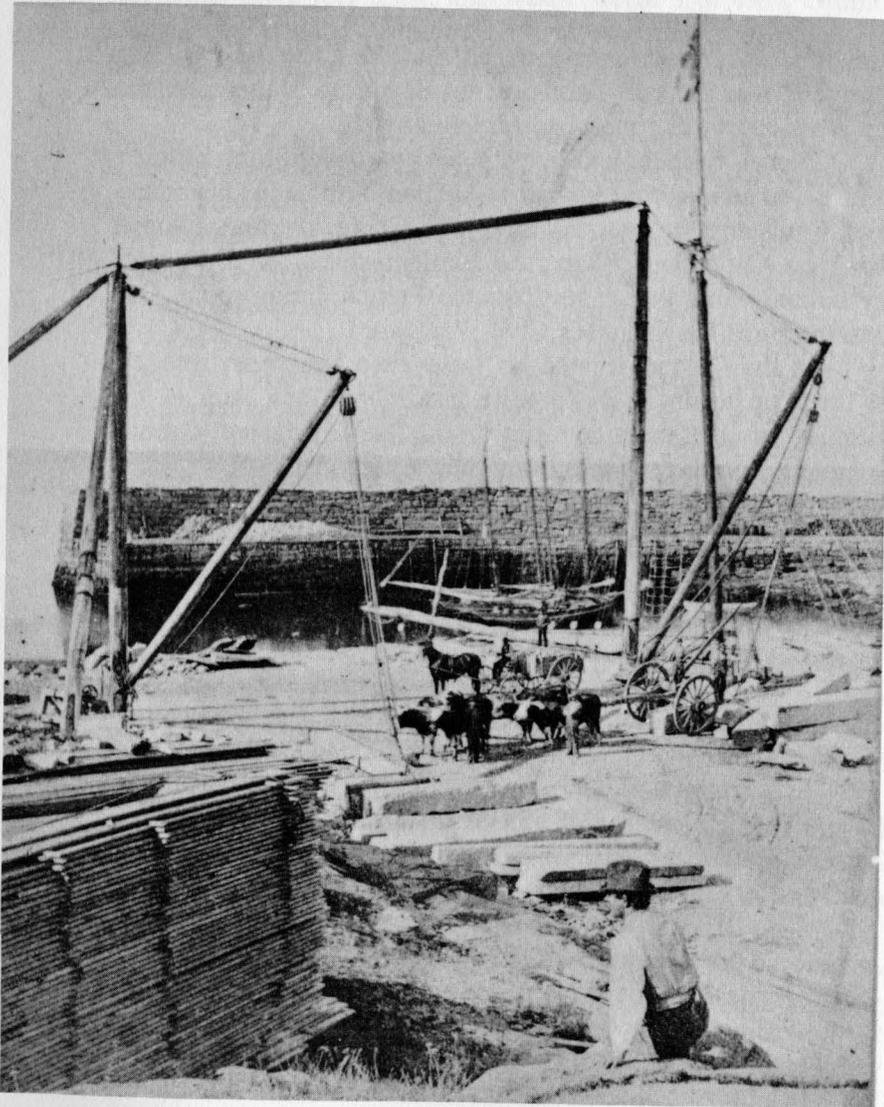
Colonel French was so elated at the news that he hadn't lost the valuable cargo for the Winfield Scott monument, that he presented the captain with a gold Howard watch and wrote a letter to the newspaper to tell people how proud he was of the men of the vessel and their captain.

They didn't know until they arrived back in Bay View that Colonel French had been so sure the schooner had gone to the bottom that he had ordered another set of stones quarried to replace those shipped. Men were already shaping the duplicates when they heard the good news.

On December 28, 1892, almost twenty years later, the Cape Ann *Weekly Advertiser* announced that the Cape Ann Granite Company was for sale—not just the Bay View stoneyards, but the Wass quarry at Jonesport, Maine, as well.

Colonel French had experienced a devastating business failure—so serious that he had to auction off most of his household furnishings to pay his creditors. There are many homes today on Cape Ann where the sunlight shines on shelves of crystal and china that came from the French dining room. One man treasures the Colonel's Civil War sword.

But the Colonel treated his losses as a temporary setback; he turns up again in the granite history of Cape Ann as the operator of a Lanesville quarry, the New England Granite Company, complete with a brand-new quarry railroad.



Derricks at Lane's Cove rigged together. Beneath them a garymander drawn by oxen and a horse-drawn cart are being unloaded. Possibly the Eames, Stimson and Co. wharf.

VI

Although it was known as the Bay State quarry for sixty years or more, the medium-sized Lanesville pit was first opened before the Civil War by two Pigeon Cove businessmen, James Edmunds and Gustavus A. Lane, Jr. They never went much beyond the cutting of granite for foundations, wharves and paving, although in 1872 they cut stone for a lighthouse.

Despite the quarry's small size, Edmunds and Lane began breaking ground for what was to become in 1895 the "Bay State" Railroad, a mile-long quarry railroad connecting Lanesville quarries with Pigeon Cove and on to the harbor there.

The partners kept their fifty oxen in small barns close to their main quarries, Bay State and Pine Pit. Another building close to the main barn was filled with hay—English hay that arrived via schooner at Lane's Cove wharf below the hill. It was probably brought over from Ipswich.

Oxen not only pulled the wagons but were used to operate the hoists in the quarries, providing the power to slide huge blocks of stone from ledge to ledge and out over the edge of the quarry by block and tackle. In those days, there were a few simple hoisting derricks, but they had not yet been designed with a bull wheel at the base. They had to be turned around into hoisting position by sheer muscle. Sometimes, it took ten or twelve men using all their power, or two oxen, to change the angle of the boom. They called it a "dead" boom, and the only "live" wire was the hoisting wire.

During this time in granite history, when horses and oxen were used to pull loads, giant-sized, extra-heavy two or four-wheeled wooden wagons called "garymanders" were built to do the work. Using a boom that was permanently rigged next to the rear axle, the quarrymen, with oxen pulling, raised a stone and chained it into place under the wagon between the rear wheels.

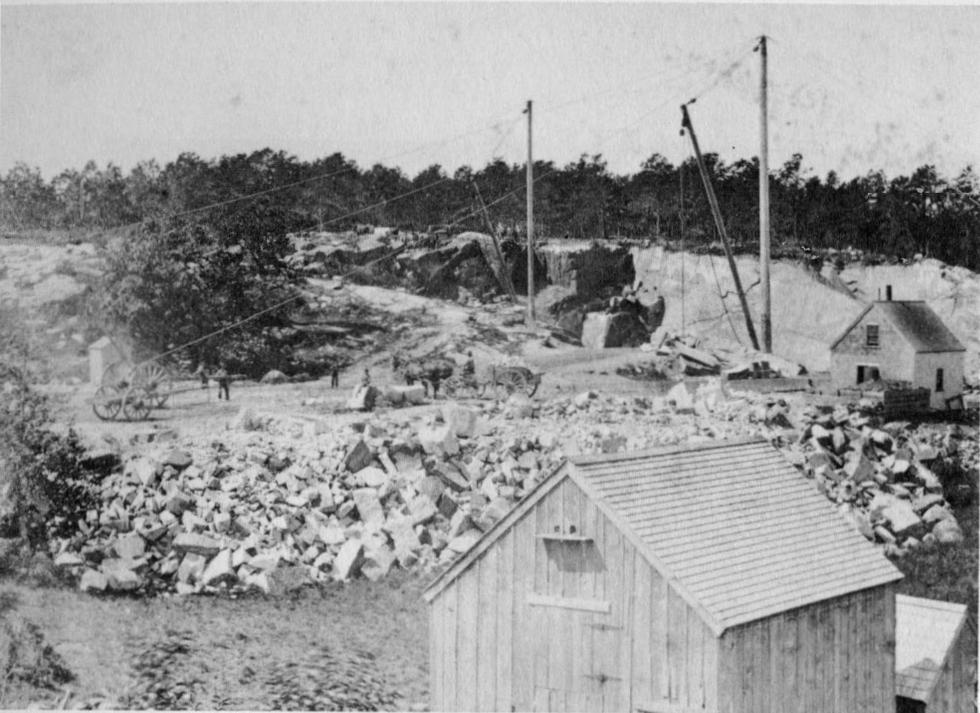


Photo courtesy Sandy Bay Historical Society, Rockport
Bay State Granite Company had pits at Lanesville running into Pigeon Cove. Note the large garymander with eight-foot wheels.

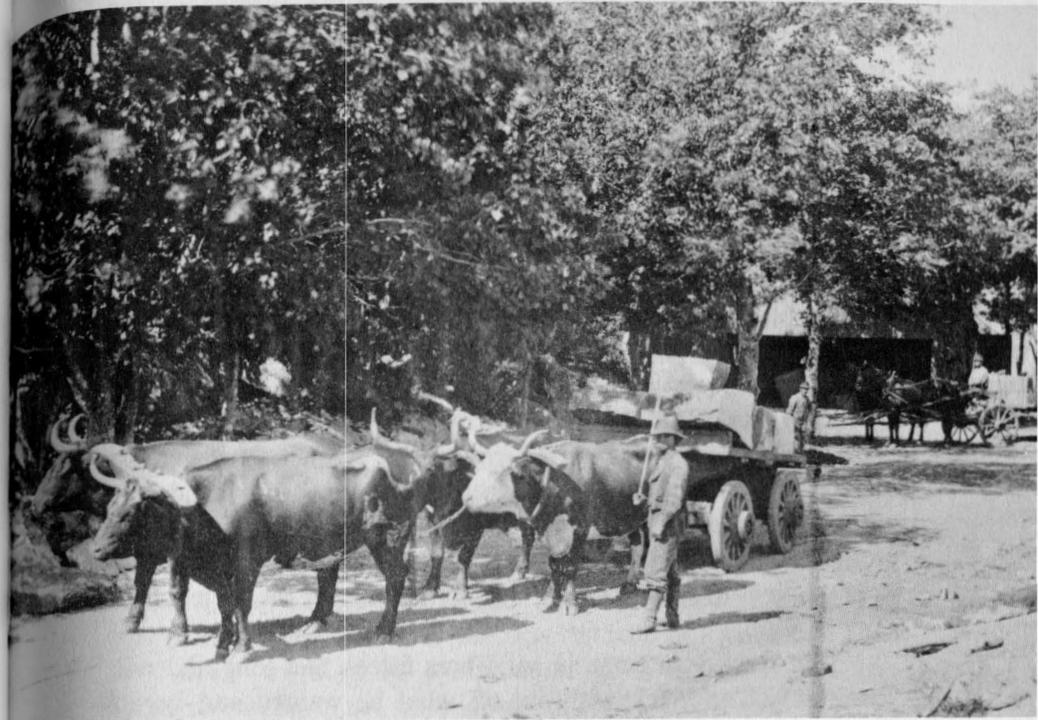


Photo courtesy Sandy Bay Historical Society, Rockport
Two pairs of oxen pull this extra load of granite on a hand-built wagon at the Bay State Granite Co., Lanesville.

It was lifted high enough to clear the rough surface of the ground over which it would travel. Four oxen, guided by their drivers, pulled the load. An identical four-wheeled wagon used for hoisting and hauling granite in Maine has always been called a "galamander." No one seems to be able to explain why there is this slight difference in the name.

On Vinalhaven Island, Maine, a large galamander with eight-foot rear wheels, painted blue and named "Jumbo," has been set on a hill in the park. Sometimes as many as six pair of horses pulled a Vinalhaven galamander when it was underslung with a block of stone.

The Cape Ann garymanders also had rear wheels eight feet high, made of solid oak and iron. Their wheel hubs were as big as nail kegs. Putting on the iron rims was such a feat for the quarry wheelwright and blacksmith that a small crowd always gathered at the McLellan forge on Washington Street near the quarries or at Pigeon Cove near the harbor, where Story D. Pool worked, to see the fitting and hammering of the huge wheel rims.

The stock iron came in solid bars fifteen feet long and one inch thick. The blacksmith cut off what he wanted and began the heating process. But the final work was done by three men who swung eight-pound sledge hammers. The wooden wheel always caught fire when the red-hot rim was closed on it, so it was immediately plunged into water. As a result of this and all the handwork that had been done, no wheel was ever known to come off of any quarry wagon.

Most of the garymanders in common use on Cape Ann were two-wheeled wagons with a boom. Jiggers were also used, sometimes carrying one giant stone. Platform wagons with extra-strong artillery wheels were used for extra-heavy loads. Sometimes the stones were twelve feet long, and they had to be moved from the quarry to the cutting shed, then to the place of shipment. Small carts were used for carrying paving blocks to the schooners; tip carts were used for rough grout or broken stone for fill.

In 1872 Edmunds and Lane received a contract to furnish the 12-ton blocks for the foundation work at Race Rock Light on Long Island Sound, eight miles off New London, Connecticut. This was quite a feather in their caps, for most of these big contracts went to larger companies. Their most experienced stonemasons worked on the contract, for the finished blocks had

to fit together perfectly when lowered into place underwater at the ledge.

In July that year, the steamer *Enterprise* was refitted at Biddeford, Maine, especially for the work of sailing down with the stone from Lanesville. Her decks were replanked throughout and a new foremast was set in, "derrick style," so she would be able to hoist and lower stone. On her first voyage to Race Rock, she carried nineteen huge blocks, each one as big as two pianos.

The lighthouse work was being engineered by F. Hopkinson-Smith, a summer resident of Pigeon Cove, who was later to work on the Statue of Liberty and the Brooklyn Bridge. He detailed much of the work actually carried on and some of the problems he ran into at Race Rock, or "Shark's Ledge" as he termed it, in his novel, *Caleb West, Master Diver*.

However, he did not change the name of his favorite Cape Ann sloop, the *Screamer*. She was built in 1873 and was the heroine of the granite shipping people on Cape Ann. Down at Pigeon Cove, at the Pigeon Hill Granite Company where she was moored, oldtimers said she was "as stiff as a church." That was meant as a great compliment. It is believed that the *Screamer* made many trips down to Race Rock with smaller stone, but she never took such big blocks as those that were sent down on the *Enterprise*.

Divers in ponderous suits with helmets that screwed on worked underwater as the 12-ton blocks of Lanesville granite were lowered for the foundation at the Rock—a difficult feat, for each block had to be guided into its designated place on a sloping underwater ledge.

The foundation work was well underway when Hopkinson-Smith discovered, after running a test with rods during the winter, that government engineers had miscalculated the depth of the water. Consequently, he had to redesign the whole project, coming up with an ingenious idea of creating a huge concrete "turtle back" to hold the base on the ledge. It turned into one of the most talked-about engineering feats of all time in connection with the building of a lighthouse.

Before he could build the underwater cone he proposed, Hopkinson-Smith had to set up four derricks on the ledge, raising them all at once so they would balance properly. Setting up the fourth derrick and tightening the final guy wire was like setting up the fourth leg of a chair while the other three teetered slightly off balance.

The men did preparatory work for the derricks for three weeks before they stepped the masts in their sockets and rigged them with lines. Their first ticklish job was to tighten the heaviest guys on the seaward side, where there was the most pull; then they adjusted the chain guys that connected the derricks to each other.

Chains in those days were seven-foot rods of iron fastened end to end, necklace fashion. Each section weighed twelve pounds, and there could have been fifteen links in one guy wire.

Twice the four derricks were almost straight, when they suddenly reeled and fell over. The men quickly dove among the seaweed-covered boulders, for the tide was just coming in. Miraculously they escaped injury as the masts slammed down from their great height. Deadly chain guy wires whipped the entire area before they were still and the men could emerge.

On the third try, all hands heaved and pulled on the fourth derrick guy wire, having raised the other three. Inch by inch, using a watch tackle and all their muscle power, the men heavehoed in unison, slowly and steadily, until the wire with the big hook was finally fastened into the iron ring in the bedrock. Then the four derricks stood, their guy wires quivering, sturdy as a suspension bridge.

The captain of the crew on the rocks looked up from successfully passing the hook into the ring, squeezed seawater from his beard, and said, "They'll stand now till hell freezes over."

Delays were constant due to the weather and to government red tape, so that it was New Year's Day, seven years later, in 1879 that the light was first shown from the tower at Race Rock.

James Edmunds had to call upon the skill of the Gloucester police one April day in 1874. A big box of granite cutting tools with his initials on it had been stolen some time before, and despite his offer of a reward for information, nothing had been heard about it. That is, until Edmunds received a letter from a man who called himself J. E. Manning. The writer said he knew where there was a box two feet long, eighteen inches wide and a foot high, full of tools marked "J. E." He described some of the tools and asked if he could have the reward provided he led Edmunds to where they were hidden. He asked for an immediate reply.

Mr. Edmunds became very suspicious. He knew of no one in his area with such a name, so he set up a watch at the Gloucester

post office to see who would come to collect the letter he had sent to "Manning."

The watch paid off. In came a tall man who seemed a little familiar to Mr. Edmunds, but he decided to wait a bit before confronting him. Alerting the police nearby, Edmunds followed the man when he headed for the railroad crossing. Then he began walking the track toward West Gloucester, the track that crossed Annisquam River.

Wanting to cut him off, the officers and Mr. Edmunds jumped into the horse-drawn police wagon on the avenue and hurtled over the shore roads and over the marsh to West Gloucester depot. A big barn was close by. Sure enough, as they waited behind trees where they could see the barn door, their man went into it.

They gave him about three minutes headway, and then plunged through the open door. They discovered him on his knees with a box of granite tools. Mr. Edmunds identified them, and the man confessed that he had taken them, hoping to sell them. When he couldn't because of the initials, he waited to collect the reward himself. He was a drifter, working from one quarry to another, and that is why he had looked familiar to Mr. Edmunds. He had been working at a quarry next to his.

It was in that same April that the old firm of Edmunds and Lane was officially "remoded and amplified" into the Bay State Granite Company, headed by Charles Guidet as the new president, and Capt. Lane as treasurer. They ordered a big sign to be painted immediately for their office building and store near Pigeon Cove Harbor. It cost them twenty dollars.

At first Bay State contracts were mainly for edgestone, foundation blocks, and paving blocks by the thousands for cities in New York (Albany was one), doorstones for houses and barns, wharf stone, and capping. In August 1874 they shipped, in the schooner *Roderick Bill* out of Lane's Cove, 106 tons of tower stone consigned to Boston. This was evidently meant for a lighthouse, but their journal does not indicate which one. Meanwhile, lighthouse work was still going on at Race Rock.

Electric or galvanic batteries were just coming into use in firing blasts in the quarries when the Bay State started business. Their first attempt to loosen a large amount of stone came that fall as they packed a charge into two holes, one eight feet deep and the other, ten feet deep. They announced that granite estimated at 1,000 tons had been freed.

On April 4, 1878, Lewis Swasey, an employee of the Bay State Quarry, was fatally injured in a blast while using the old method of hand firing with a fuse. He had blown the seam once successfully, but when he approached to fill the seam again, carrying an eight-pound can of black Titan powder, the entire charge blew up. It was believed that an unnoticed piece of moss on fire nearby had caused the second charge.

That very afternoon at Pigeon Cove, a young woman named Susan Elmira Lurvey was taking finishing stitches on her wedding gown, the one she would wear as Lewis Swasey's bride. While she sat there, daydreaming over her needlework, some of her fiancé's fellow workers came to the door to tell her of the tragic accident. Susan Elmira mourned Lewis all her life, and she never married. The young man lies buried in the Lurvey graveyard, and Susan Elmira is there beside him.

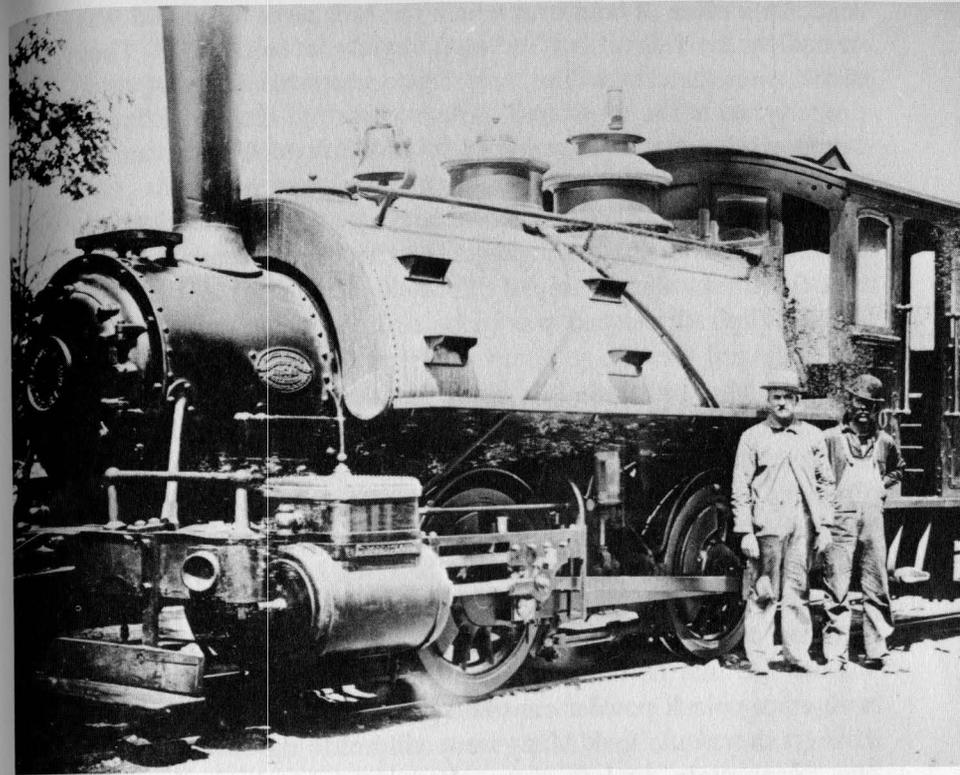
The Bay State Granite Company folded in 1879 and auctioned all their holdings, including fifty acres of quarry land. Charles Guidet was the principal bidder. He evidently planned to operate as before, trusting to the big paving block contracts to keep him going the year round. It was at this time that he developed the Guidet block, named for him. Its principal market was New York City.

In September 1892, Charles Guidet died and the business closed. There was vandalism at the quarries as they lay idle. Derricks were cut down and smaller items were taken from the premises.

It was just the right time for Colonel Jonas H. French, who had failed with the Cape Ann Granite Company at Bay View, to start up in business again. He wanted to try again with a smaller company—one that he thought had a future—and the Bay State was the one. He had always liked the idea of the roadbed that had been begun for the railroad. On February 5, 1894, he was in business again at the Bay State, re-naming it for his previous company, the Cape Ann Granite Company and calling the railroad the Cape Ann Granite Railroad, even though all the local people stubbornly called it the old Bay State.

His first announcement was that the railroad would be completed at once. They would use the route first surveyed and graded and would cross the main road (Granite Street) near the post office. From there the road would curve around the beach to the "packing wharf," which would be extended.

There was a delay in building one of the sections of the



Locomotive "Nella," Bay State Granite Co. and Cape Ann Granite Co., an 0-4-0 tank type, Rhode Island Works, 1895. Man at left is Blanchard Mitchell, engineer.

road, for a piece of land over which the rails were to be laid was owned by the Rockport Granite Company, a competitor. They didn't want the Lanesville company to cross over any of their property, even though leased. After a hearing, the court finally dismissed the case in January 1895 and Colonel French immediately planned the actual opening of his quarry railroad.

It was to have a track distance of 1.44 miles, all sixty-pound rail on a standard gauge. People can remember today that the tracks were stamped "Sheffield, England" in two-inch letters. The railroad bed was to be two rods wide.

In April the village pump was removed to make room for the railroad crossing, and finally in May on a Saturday evening, all Pigeon Cove turned out to see the locomotive that had arrived at the cove. She was called the "Nella" after Colonel French's wife. The engine was a standard gauge 0-4-0 tank type, purchased from the Rhode Island Works in Providence.

The Nella became a familiar sight in Lanesville, chuffing along the track, backing and pulling. One morning chore neighborhood children had was to wait for the engineer to throw out his old fire that he had banked all night. Then they darted in with empty black powder cans and gathered up all the burnable clinkers they could find. Many were still hot to the touch.

Youngsters used to jump aboard the handcar whenever they could and pump it from the end of the wharf up toward Lanesville, until the foreman saw them and stopped them.

In 1895 when the quarry railroad opened, the Cape Ann Tool Company was also built at the wharf. This meant that the Nella, pulling cars, crossed Granite Street from the Pigeon Cove section, then passed through a double doorway near the site of the 3,200-pound hammer today before continuing to the wharf.

At the same time that Colonel French was building his Bay State Railroad from Lanesville to Pigeon Cove, he and other quarry operators and businessmen had formed the Cape Ann Granite Railway Company, selling two hundred shares at one hundred dollars each to "locate, construct and operate a street railway" to run from Gloucester to Rockport. They planned to ship granite, having sidings from quarries along the route, finally connecting to the Eastern Railroad, and ultimately to Boston. But their idea was never worked out because of opposition from the street railway passenger service then being extended around the entire Cape. They said it would be too hazardous to have the two railways in such proximity.

In 1896 the newspaper reported that the Cape Ann Granite Company was booming and had a total of fifteen stonecars at the works, including six new ones that had just arrived.

But by August 1902 the company was in financial difficulties, and in June 1903 it was announced that the old Bay State quarry was being operated by a new company called the New England Granite Company. This company continued to produce foundation stone and thousands of paving blocks, sometimes accepting subcontracts from neighboring quarries for paving to swell their own business.

They painted all their barns and sheds a bright shade of red, except for the locomotive shed, which was black. They had a horseshoe-shaped cutting shed close to Emerald Street with a derrick in the center.

The superintendent was a man named Symond who had returned from the Civil War with Confederate bullets in his leg. He had been in the quarry, except for the war, ever since Edmunds and Lane began their business. Sam Shaw was the hoisting engineer.

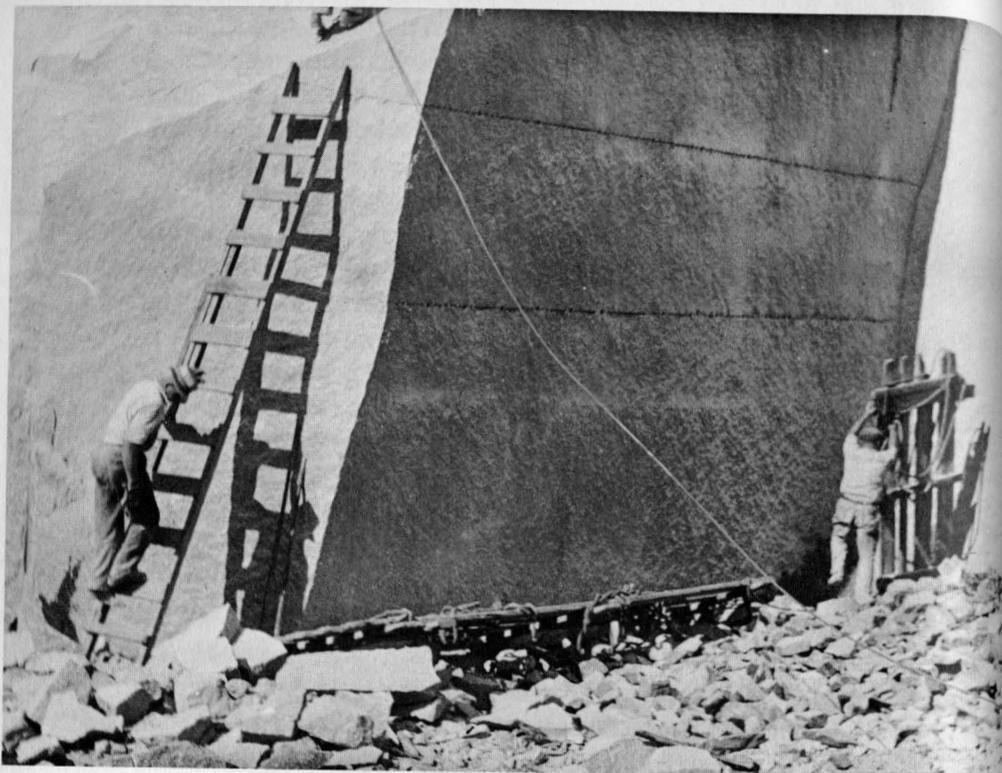
However, by 1908, only five years later, the company was not in operation. The main quarry had been allowed to fill with water, and it was so deep that only the top of the mast and boom of their main derrick was visible. In April a big brush fire near the quarry set their powderhouse on fire. It was estimated that three kegs of powder blew up and shook the windows of every Lanesville home.

About 1914, Thomas Fitzgibbon bought the quarry for six hundred dollars. He was a veteran stonecutter, but decided to have his nephew Philip become superintendent of the quarry.

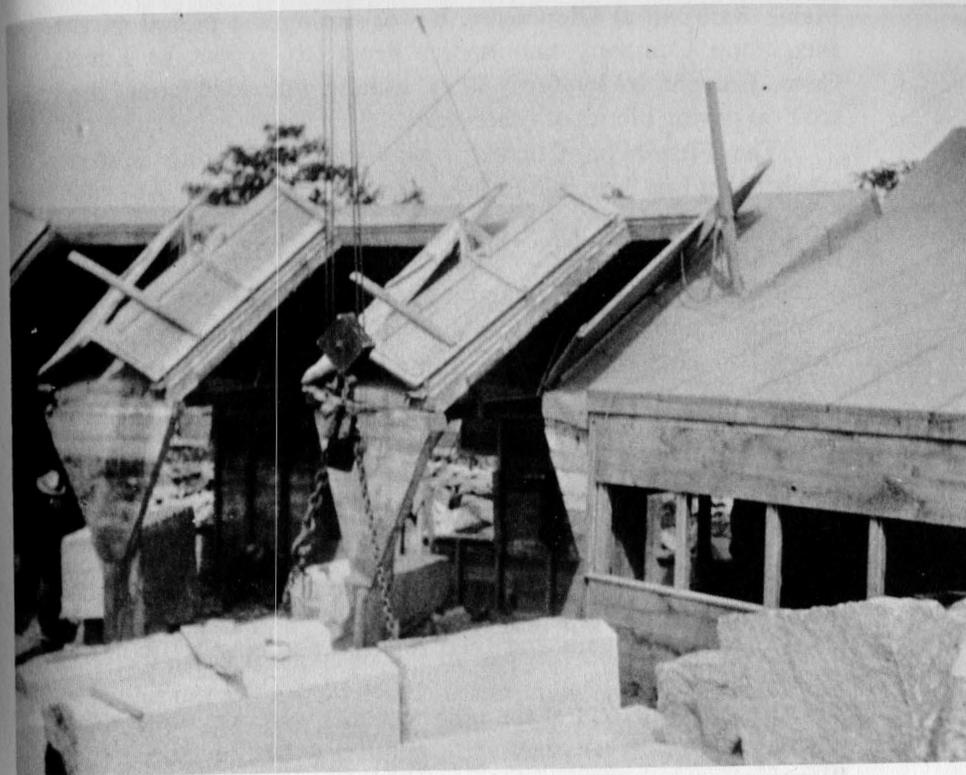
The Fitzgibbon Company's first big blast was felt by every householder in Lanesville and Pigeon Cove, as tin dippers rattled in water buckets. The blast loosened 14,000 tons of stone in an area eighty feet square on top. Ten lift holes were cut to a depth of forty-two feet, and they were charged with seven kegs of powder. It took a cartload of sand to tamp the charge down.

"When it blew, it cracked right across the rift straight as a board," Fitzgibbon recalled some years later.

At first the company continued to ship via their railroad to Pigeon Cove Harbor, but finally they were forced to sell the Nella, and turned their eyes to Lane's Cove as their easiest shipping point. As trucking became useful, they transported many loads of granite to the freight depot of the Boston and



From the Philip Fitzgibbon Collection
Fitzgibbon quarry, Lanesville, about 1910, showing lines of drill holes
in the ledge. Staging has been taken down.



From the Philip Fitzgibbon Collection
Fitzgibbon quarry, Lanesville, about 1906, showing cutting sheds with
roofs that lift and fold for light and air.

Maine Railroad at Gloucester. It was during the period of the Fitzgibbon Company that barges began to appear in Lane's Cove, brought in by tugs. They usually unloaded coal, then took on paving blocks or other stone.

The Fitzgibbon Company also started working a stone crusher that had been idle for many years.

About 1924, after a period of idleness, a new company, Cape Ann Quarries, Inc., composed of New York businessmen, began to run the entire quarry operation at the Fitzgibbon Pit, retaining Philip Fitzgibbon as their superintendent. Then in the 1930s two companies emerged and Cape Ann Quarries, Inc. disappeared. The two new ones, Cape Ann Granite Co., Inc. and Ultimite Paving Block Corp. of America, worked side by side, using separate entrances and exits. They were also run by New York businessmen.

The Ultimite Company was set up to make those special paving blocks using a concrete form with pieces of granite set into each one. These were the blocks that Thomas Fitzgibbon had experimented with and then rejected as being too complicated to produce.

After World War II the quarry works were again idle until the fall of 1952 when they were purchased by Salvatore "Joe" Bianchini, a veteran granite man who had built seawalls and breakwaters all along the Atlantic Coast. Bianchini had been in business at Folly Point, and earlier in his granite career had been a hoisting engineer for Tom Fitzgibbon.

The first project Bianchini had was to pump out eighty million gallons of water from the main pit just so he could reach the ledge for stone blocks. Then he had to take down and hoist out the old derrick still standing in it. All its guy wires were loose. When the water went down, the old blacksmith shop was discovered, still in good condition except for the roof. It had been built of Ultimite blocks.

The Bianchini quarry provided stone for twenty-two overpasses or bridges over Route 128 and three or four more on Route 95. They also sent out stone for seawalls and breakwaters. The company was the first in this area to use a crane for hoisting granite in a quarry.

After the senior Bianchini died, his son Charles operated the business until he retired a few years ago. He is now building a granite wall around the pit, convinced that it will remain filled with water at least the rest of his lifetime.

VII

Butman's Pit, a waterfilled quarry in Lanesville not far from the Orthodox Congregational Church, was named for John Butman of Rockport, its operator. When he was born in 1822, his father was so elated he fired off a musket in the front yard, for he already had four daughters.

Mr. Butman spent his entire life listening to quarry hammers. He saw the first oxen hauling "pieces of ledge" down to the Pigeon Cove and Folly Cove wharves, and he lived to see the quarry named for him go out of use and fill with water. As an old man out for a leisurely drive through Lanesville, he always stopped to allow his horse to drink in the shallows of the pit. At the same time, he carefully wet the buggy wheels so they wouldn't shrink.

Eames, Stimson and Company of Rockport were quarrying Butman's Pit and the one next to it on Washington Street called "Canney's" some time prior to 1850. But Jotham Taylor of Lanesville was quarrying Butman's Pit in 1843 when he furnished the stone blocks for the Lane's Cove breakwater. He had a company boardinghouse next to the church near the pit.

After the Civil War, Eames, Stimson and Company sold their two pits to the Lanesville Granite Company, of which John Butman was president. They worked on edgestone, foundation stone, and paving blocks by the thousands during the almost half century they were in business, but their main quarry continued to be Canney's.

In 1878 they had such a blast that a piece of stone weighing twelve pounds struck the house of Mr. Elbridge Young, knocking off several clapboards. Mrs. Young had been standing near that spot just before the blast and had fortunately just entered the house.

Charles Andrews, a clerk at the granite company, papered



Rim of old Butman Pit, Lanesville, showing Congregational Church, the Morgan homestead, and McLellan the blacksmith's place.



Lanesville Granite Co., Washington Street, now Manship's Pit. Blacksmith McLellan with apron. Quarrymen show drills and hammers *circa* 1885.



Canney quarry when it was Eames, Stimson and Co. at Lanesville, after the Civil War.

and painted the office in a fit of spring fever in 1892, and in June that same year, the schooner *Edward W. Perry* loaded twenty-eight thousand blocks in seven and a quarter hours at Lane's Cove. The blocks had been teamed to the wharf.

This big quarry was quite a show place, for it was five hundred feet across in size and could be visited easily, being only a few steps from the side of the main highway.

Its granite was medium gray, not bluish like the Pigeon Cove granite.

On August 16, 1898 an auction of thirty thousand paving blocks was held on the wharf at Lane's Cove. The Lanesville Granite Company was going out of business. Most of them were bought by Barker Bros., a neighboring quarry operator in Lanesville; a horse, harness, and democrat wagon were sold to George Rowley for sixty dollars. Edwin Canney of Pigeon Cove, whose name was given to the quarry pit until the 1940s, bought the company itself in 1899. He was a forward-thinking man, similar to his neighbor in Lanesville, Colonel French. The first thing Canney did was to begin to build a twenty-five hundred-foot inclined railway from the quarry across Washington Street, through a field, across Langsford Street, and then over the sand dunes to a new pier, which would be constructed from the stone sent down. This pier would jut out into Ipswich Bay. Then the railway would be continued to move granite consigned to the sloops and schooners expected to tie up there. Work on the railway began on February 10, 1900.

By May 1901 the track was completed and ready to take up to 7-ton loads down to the dock. The Mayor of Gloucester and all the aldermen came down to inspect the granite railway and to give their verbal approval. At first it was thought that Canney would require crossing gates on Langsford Street, because of the streetcar track it had to cross and the ordinary traffic, but because the Rockport Granite Company at Bay View used only a flagman although their locomotive crossed the main road, a flagman system was arranged at Lanesville.

A crowd was on hand to see the first car go down, carrying a 6-ton stone on it. While everyone watched, the operator stopped the car at the Langsford Street crossing, and after resuming his glide down to the shore, canted the big stone off by tipping the deck on which it lay.

Mr. Canney was heard to remark, "We should have done this forty years ago."

Before it faded out of business during World War I, the Canney quarry had become so big it had five derricks, three hoisting engines and an air compressor, four steam pumps to keep down the water level in the quarry, and a crusher that could produce 100 tons of crushed stone in a day.

The enterprising firm of Barker Bros., working as a family headed by Henry Barker, of Quincy, opened up quarries and developed the land southeast of the Washington Street quarries. Barker Bros. had a horseshoe shaped arrangement of buildings and sheds in their quarry yard, far up into Leverett Street, where there were only old woodlots, long stripped of their big trees. Their land spread from the old street to Cleary's Swamp in a rim of ledge-marked land. This area had always been called the Morgan Quarry Lot, named for its former owner, Nathan Morgan, who lived during Barker Bros.' time in a little house facing all the quarries.

Although proceeding very quietly, the firm was evidently a leader in the granite business, from 1852 to 1906. One brother and the father kept a quarry going in Quincy and at Fox Islands, Maine, while another worked in Lanesville. Charles Barker kept an office in Philadelphia, plus a finishing yard there that saved costly transportation. Blocks could be sent down to be completed there and didn't have to be boxed with lumber if they were special-dimension stone. At the same time, Mr. Barker developed the city's market, selling millions of paving blocks that could be shipped by three-masted schooners out of Lane's Cove.

Perhaps the biggest job the Barker Bros. did was to provide the stone for the Masonic Temple still standing at One Broad Street, Philadelphia. It was dedicated in September 1873.

Strangely enough, although the entire structure is of granite, only the Broad Street front and the Filbert Street front are of Lanesville granite. The eastern and northern fronts on Juniper and Cuthbert streets are of Fox Islands granite, probably from Vinalhaven. And the main "porch," as architects call the greatly detailed granite piece at the front entrance, is built of Quincy granite from Barker's quarry there. It was probably cut in the Philadelphia yards to avoid damage in handling, for it is an intricate piece of work.

There is a two hundred fifty-foot grand tower at the southwestern angle of the Masonic Temple, the foundations of which were sunk thirty-one feet below the walkway to make sure it

would always be steady. The foundation walls are massive. Tower walls rise far above the roof of the building; it has turrets at the angles and is square-topped in strict Norman style. The spires surmounting the turrets are elevated so far above the street that on the northwest corner the main turret rises thirty-seven feet above the square of the tower. Decorative peaks and windows are marvels of the stonecutting yard of those days.

The Masonic Temple celebrated its hundredth anniversary in 1973 and invited the whole world to come and admire the building. They described it as "an architectural jewel." It was designed by James H. Windrim, a prominent architect. The building contains seven lodge halls, examples of Corinthian, Ionic, Italian Renaissance, Norman, Gothic, Oriental, and Egyptian styles.

When the cornerstone was laid on June 24, 1868, they didn't dream it would cost \$1,600,000 when finished, excluding decorations and furnishings at that.

Another outstanding and long-remembered construction job for which Barker Bros. furnished granite from their Lanesville quarries was the Provident Life and Trust Company Bank, one of a row of six banks built on the north side of Chestnut Street in Philadelphia, between Fourth and Fifth streets. The building was designed by the outstanding architect of his day, Frank Furness, and completed in 1879.

By 1960 the building had been demolished, and great were the groans from leading people who felt it had become an architectural treasure and should have been saved. At the beginning, though, there had been mixed reactions to Furness's design, and its highly decorative facade had been a subject of controversy for many years.

It was about 1875 that the Ridgway Library was built at Broad and Christian streets in Philadelphia, a high Victorian building with a Greek Revival facade. Because the building is today difficult to heat and in constant danger from fire, it no longer serves as a library, but is a recreation center for the community. The building will probably be demolished when there is no longer any use for it, but it is probably the last important structure in Philadelphia that was a product of the Greek Revival period in architecture in America.

Whenever a new process was connected with finishing granite, Barker Bros. was usually the first to try it out. They had one of the first polishing mills in the country in their Quincy

yards in 1869. When the gang saw was developed in 1877, they used it to cut granite at their Lanesville quarry, the first in the United States where this was done.

The man who invented the polishing process by machine had tied it up with so many restrictions that it cost too much to be used locally until a Canadian offered chilled iron shot as an abrasive at a price the local operators could handle. Soon Barker Bros. and other quarry operators began using the Canadian product, even though they soon found out they were liable for damages for infringement of the American patent. But the owners of the patent settled most of the claims by long-time notes, and when the life of the patent expired, only a few of the notes had been paid.

Stone was sawed with wet sea sand before the invention of those tiny balls of iron they called "shot." Sand wouldn't work on granite, though, for it was much too hard.

The new gang saw, with chilled iron shot as its abrasive, was set into a big oak frame that held the iron saw running lengthwise. At first only one blade was used, but later saws had as many as seven moving through the stone in their elephantine rhythm.

Each block of stone was positioned on a moving car just below the saw frame and carefully set to within an eighth of an inch. As the water poured into the sawing area, a worker kept shoveling in the iron shot so that the cut could be made.

Today most sawing is done with wire saws and the abrasive does the real cutting.

A man named John Harrison had patented cast-iron shot originally. Shortly after he was discovered using it successfully in his own mills, the demand became so great that a large plant was opened up in England in 1887 just to produce the chilled iron shot, the first of its kind in the world.

Chilled steel shot gradually took the place of the iron shot, and it was furnished in different sizes as well, varying according to the hardness of the stone to be cut.

Barker Bros. were on hand in 1853 when a machine for "dressing stone," smoothing it down to a finish, was invented by a Charles Wilson of New York, after a type he had seen in Aberdeen, Scotland. For a while it was used in Quincy by Richards, Munn and Company, but they didn't like it. Then Barker Bros., operating at that time as Barker, Wright and Company, moved the engine down to Lanesville. They used the

machine for one season, but it didn't save them any money, so its use was discontinued.

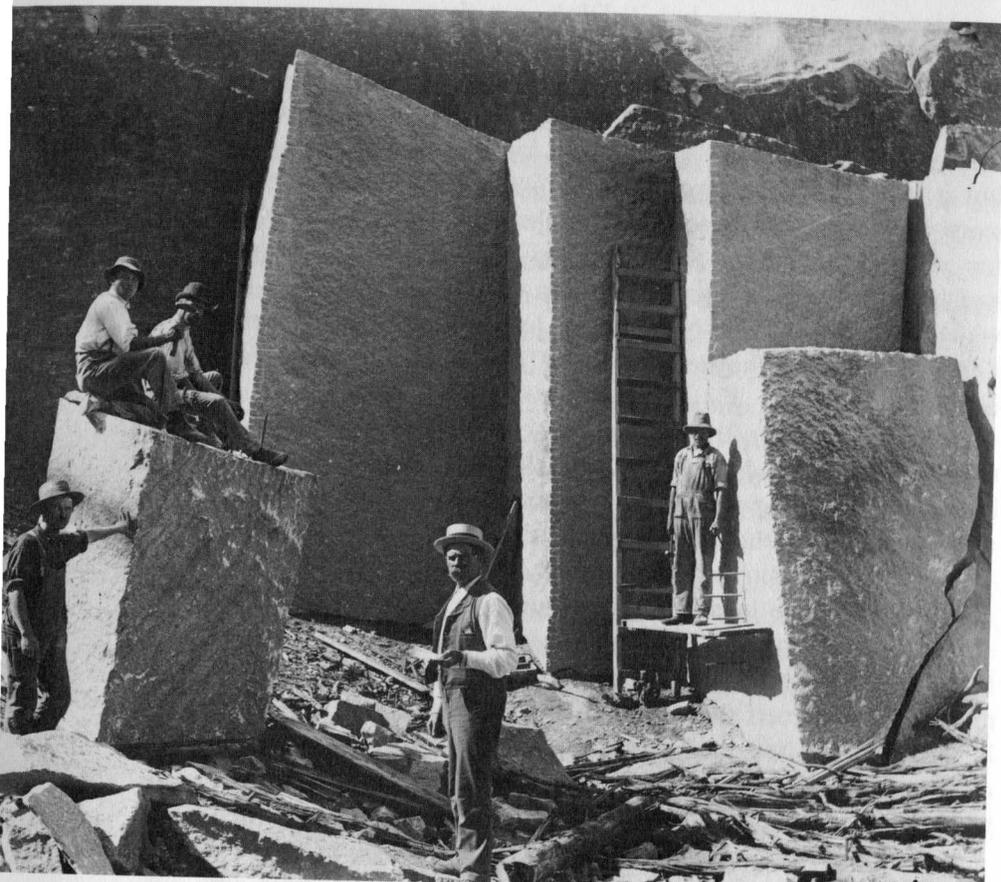
Quarry accidents continued despite all the care taken to avoid them. In December 1865 William Cleary had a stone fall on his foot. This wasn't a first time for that type of accident, but it was the first time a steam engine was used to hoist the stone back up again as soon as the chain had been repaired. A few years later, in May 1868, William P. Hayden, the foreman, had both legs broken above the knees when a granite block fell while being hoisted. He had jumped just in time to avoid being killed. Again they hoisted the stone back up with the steam engine.

In March 1879, Barker Bros. began the season by shipping twenty-five thousand paving blocks to Philadelphia. They had been cut during the winter, as was the custom, and stacked in neat banks along the west wharf at the cove.

Barker Bros. continued with their business until October 4, 1906, when the local newspaper announced that thirty acres of quarry property plus dwelling houses were for sale. This was the Barker property. Later people said it was the coming of macadamized streets that finished Henry Barker. When he died, his family said the modernization of street surfaces and the resultant loss of the paving-block market had really contributed to his death.

The main pit on Leverett Street that still bears the name of Barker is now a private water supply. It is located in the middle of the original Leverett Street, the old quarry road they built into the woods. In quarrying wider and deeper, Barker had to move the road so that it passed to the east around the quarry, turned uphill through a very dangerous quarrying area with steep drops on both sides, and continued up into the woods. There it joined the High Street quarry roads and quarries.

The next piece of the quarry jigsaw puzzle blasted out of the northeast section of Cape Ann was occupied by the William R. Cheves Granite Company at Lanesville in 1876. Mr. Cheves's land, eight acres pockmarked with old motions and fairly large pits, was formerly the quarry property of Nathan Todd. The land stretched from the Barker holdings off Leverett Street to a line near the Blood Ledge quarry, then being operated by the Cape Ann Granite Company. It was said that when the Cheves quarrymen blasted a ledge in their green granite quarry high in



From the Alexander R. Cheves Collection

Cheves Green Granite Co. Deep Hole quarry off High Street, now owned by Walker Hancock. William Cheves in straw hat.

the hills, stones flew clear over to Blood Ledge and rained down on the workmen there.

Mr. Cheves, whose father had quarried stones for Balmoral Castle in Scotland, came to Lanesville in 1872 as a paving cutter. His old home was in Kennay, Aberdeenshire. He operated as his main quarry Devil's Rock, for many years the home of Gurdon S. Worcester, a retired psychologist and writer; and the pit of green granite now called Hancock's Pit after the sculptor, Walker Hancock, who has had his studio near it since the early 1930s.

Strangely enough, no one has ever trucked off those huge grout piles built up by the Cheves quarrymen as they sorted their stones by dimension and discarded the rest. Some of the giant heaps of stone, sixty feet high, show up when the leaves are thin in the woods in the spring and fall. In the summer a passerby can feel the cool air coming from their lichen-covered slabs.

In Pigeon Cove and at the Washington Street quarries in Lanesville, the old grout piles have been carted off, mostly for the substructures of the Sandy Bay Breakwater at Rockport and the Dog Bar Breakwater in Gloucester Harbor.

The Cheves Granite Company, under contract to the Rockport Granite Company, quarried most of the stone for Dog Bar during the eleven years it took to build it. Their greatest feat was getting out the five hundred blocks, ten feet wide, that cap the top of it.

The first load of stone at Dog Bar was dumped from the sloop *West End* the day before Thanksgiving, November 28, 1894, but it was not finished until December 15, 1905, due to a lack of appropriations and much disagreement about just where the breakwater should be located and what shape it should be. It had been proposed early in the century.

By January 1898 three granite companies, the Rockport Granite Company, the Pigeon Hill Granite Company, and the Cape Ann Granite Company had worked on the breakwater, obtaining some of the rubble stone from a small quarry located at Eastern Point. Most of the stone came by vessel from Bay View and Lanesville. Dredging had been completed and 74,468 tons of rubble stone had been dropped the previous year.

By the early 1900s almost eleven hundred feet of the substructure had been completed to mean low water. This substructure was thirty-one feet wide, surmounted by a superstructure

formed of two dry walls of heavy split stone. Interior space was to be filled with rubble-stone and capped with heavy stone, forming a top course ten feet in width. The Cheves Company turned out the capping.

By the time the breakwater was completed, the local newspaper estimated that thirty-nine vessels had been wrecked on the submerged stones. Actually, the breakwater constituted an uncharted reef. Capt. H. M. Godfrey of the schooner *Eleanora Van Dusen* discovered the fact for himself when he tried to make safe harbor on Thursday evening, September 19, 1900. The *Eleanora Van Dusen* had sailed on Thursday morning from Bay View pier where she had been loaded with twenty-three thousand, one hundred paving blocks and 82 tons of rough granite. The craft was well off in the bay by nightfall, but the captain didn't like the look of the weather. So he decided to make Gloucester Harbor, and there he met disaster. He was shocked to find his vessel stuck hard and fast on rocks that didn't appear on his chart.

The crew of six blew their horn and burned a light for an hour and a half, but no one came to their assistance. Fighting a heavy southerly sea, they put out in a small boat and pulled safely for the nearest beach.

The next morning the captain returned to the vessel, still caught on the rocks, but he could do nothing to get her off. At 2 A.M. the following day, she caught fire in some unexplained manner and burned up.

The *Eleanor Van Dusen* was the twenty-seventh craft to strike the submerged breakwater since it had been begun.

There is a saying about the Devil's Rock quarry that the devil left his hoofprint on one of the ledges there and the other at the Isles of Shoals. Superstitious Irish quarrymen refused to drill holes on that big ledge, and to this day it forms an uncut peninsula in the otherwise symmetrical quarry.

Mr. Cheves conveniently shared the quarry's powderhouse with the Rockport Granite Company in later years. He also boasted the neatest compressor shed any quarry ever owned. It was operated in later years by his son, Alexander Robb Cheves, who always kept it neat as a pin with polished, shining brass. Young Cheves was also an amateur photographer and his pictures, in 5 x 7-inch glass negatives, have come to be the only extensive records there are of quarrying in the Lanesville hills.



Photo from the Foster Collection
Stone wagon from the Cheves Green Granite Co. at the top of Tucker Street, Lanesville.

When some of his quarries grew so large that they began to chew at the narrow, stone-dust covered road that twisted around them, Mr. Cheves just moved the road, building up a new base if necessary, until he finally had a vast network of roads and cart paths all through the woods. However, all the roads converged at the first hill above High Street on the way to Lane's Cove and the pier there. The company was noted for using splendid horses for their carts, keeping six of them at a time in the barn back of the family homestead on Hickory Street.

There were accidents in the Cheves quarries despite their usual alertness. One day in October 1893, Joonas Lampi, a young Finn, was struck in a strange way. He was standing near a plank when a piece of granite landed on one end of it. Immediately, the opposite end flew up and struck him in the face, knocking him unconscious. He was carefully taken to his boardinghouse by Dr. William Rowley of Lanesville, where he recovered.

To run his two main quarries and rows of paving cutters' bunkers, Mr. Cheves had nine derricks, two hoisting engines, the air compressor, two steam drills, six air plug drills, and three steam pumps.

The quarries were worked until 1917 when, because of the shortage of coal during World War I, the company was forced to quit. Then in June 1919 there was a fire in which the company lost its engine house, including the prized air compressor and other engines. Their blacksmith shop full of tools, which included thirty paving cutters' kits, was also lost. Vandals had smashed all the windows of their buildings.

The only part of the quarry buildings left today is a small section of the paymaster's window wall incorporated into the old Cheves homestead at Lanesville; and high in the woods on a winding road, overgrown with lilies-of-the-valley in the spring, is the concrete base that steadied the big air compressor.

James Johnstone Vernon was a Scot who opened a quarry near the Bay View line bordering the Cape Ann Granite Company works. In 1878 he was shipping granite via a twisting downhill cart path to Hodgkins Cove where it was carried away in sloops and schooners to other New England ports. To reach his wharf on the northeast side of the cove, he had to build a small bridge over Little Creek. During the winter many of his shipments were made over the Cheves Granite Company roads to Lane's Cove through the woods.

Vernon handled paving stones, rough stone jobs, hammered building work, which included an annex to Princeton University, New Jersey, and other contracts.

He sold out in 1894 and later took a position as superintendent of the Bay View plant for the Rockport Granite Company. He stayed with them, training many men in stonecutting and management, before he retired in 1902.

Vernon's Pit, now water-filled, is owned by the City of Gloucester, for which its towering grout piles and ledges are a stone supply.

A quarry on the Annisquam River sounded like a bit of Scotland. During the Civil War, just prior to 1865, a pinkish-colored stone called "Aberdeen" granite was quarried there. The first Town Hall to be built on Dale Avenue in Gloucester was trimmed with this granite. But because it was destroyed when the Town Hall burned in 1869, it was thought that the stone was useless.

In 1865 the quarry was advertised for sale. Shortly after that it was being operated as the Wolf Hill Granite Company with two men named Fuller and Pratt in charge. In 1867 they were sending their blocks of stone down the Annisquam River in a "steam propelled" vessel according to the *Cape Ann Weekly Advertiser*.

Blynman Canal, connecting Annisquam River and Ipswich Bay with the harbor, had been dug by the Reverend Richard Blynman in 1643, not long before Gloucester became a town. By 1723 the canal was impassable again, and for almost another hundred years, no boats could go through. Then the Gloucester Canal Corporation cut a new canal two hundred feet long and completed reconstruction of the drawbridge to cross it; but the canal soon filled in with sand.

In 1868 the Wolf Hill Granite Company decided to reopen the canal and dredge it; their steamer *Samson* took part in the dredging operations. But by April of that year, they had already spent six thousand dollars and the project was not finished. By the end of the 1860s, when the granite company had hoped that business would be at its zenith, the market had dwindled. They were overloaded with debts and they gave up. The quarry works were deserted and in 1870 the derricks were taken down. Wolf Hill became a choice residential area, and signs of the old Aberdeen Granite quarry were obliterated for all time.



Trumbull Granite quarry works, *circa* 1870-74. Horses are pulling stonecars at West Gloucester, not far from Stoney Cove.

In the fall of 1870 on the western side of the Annisquam River, an enterprising man, Solomon Trumbull, together with Charles A. Chadwick and John Todd, formed a partnership to carry on a stone business under the name of the Gloucester Granite Company. Besides their quarries in that beach section of West Gloucester, they had another quarry in Bay View on Revere Street.

Stonecutters in their Bay View yards made most of the monuments for the Oak Grove Cemetery in Gloucester, just completed at the time. And the company received contracts for seawalls and breakwaters.

By 1874 the company employed one hundred thirty-five men altogether, and they used two schooners and one steamer for their shipping. A half-mile long railway with cable cars connected their quarry to the wharf. Horses pulled the cars back to the quarry.

The company evidently had its own boardinghouse at the quarry, for it experienced a tragedy on March 15, 1877, when two Irishmen died because they tried the popular shortcut via the railroad bridge over the river to get back to the boardinghouse from an evening in town.

Both young fellows, the two had just passed the bridge tender and greeted him in a friendly manner as he went on his way home.

He had moved only a few hundred yards down the road when he thought he heard cries for help. Running back, he found that the shouts were coming from the water underneath the bridge. He quickly grabbed a small boat on the river bank, broke the lock that held it, and while shouting for assistance, managed to chop the ice out of the boat and start to push off. Three other men suddenly loomed up out of the dusk to help him.

Quickly they rowed out in the gathering dark to where they found a man clinging to an abutment. They hauled him into the boat and pulled for shore as fast as they could. Two of them carried him quickly to the bridgetender's house and laid him down on the floor to begin to warm him. Someone built up the fire quickly. Meanwhile, the first two men were out hunting for the other young fellow.

Leaving the young man on the floor in front of the fire, the second pair of rescuers rushed out in search of a policeman. They hurried back with one, but discovered to their horror that

the young man on the floor had died during their absence. They had been sure he was all right when they left. He had talked with them and said he was comfortable.

The next morning the searchers found the second quarryman some five hundred feet south of the bridge. There was a lot of ice on the railroad track timbers that cold March night. One of the quarrymen must have slipped over, the other perhaps grabbed for him, and both of them must have fallen into the water. No one ever knew the exact story.

Mr. Trumbull, senior partner of the Gloucester Granite Company, was a man who tried all kinds of things, such as manufacturing glass bricks. He used the nearby sands of Wingaersheek Beach, which he owned at the time.

One granite project he was in charge of was building three stone castles for Edward C. Hawks and his two brothers at Wingaersheek Beach. Each of the three brothers was to build a twelve-room castle for the family's use in the summertime. But when it was time for the third castle to be built, the Mrs. Hawks who had just arrived from London is said to have explained that she preferred a cottage on the beach.

The first floor is buried somewhere under the dunes today. Actually, the third castle would have been the tallest of the three. From its top floor, according to plans, it would have been possible to see Portland, Maine.

It was a tremendous building job for Mr. Trumbull, for the only lifting power he had was provided by oxen.

Vandals were at work in his quarries in June 1876, when on the twelfth the cable from the derricks was cut and a sail that had been stored was taken. Someone even took the rope that tied up the quarry's steamer. Consequently, she went adrift on the rocks and was damaged.

The police caught the thieves, after some of the items turned up only two days later at a local junk dealer's place.

Even when he retired to his West Gloucester home close by the quarries and the beach, Mr. Trumbull couldn't leave stone alone. He built a wall of many kinds of different rocks, coral, and glass. Two of the rocks have profiles that face each other conversationally much to the surprise of passersby.

VIII

A cryptic announcement dated April 6, 1892, in the Cape Ann *Advertiser* of Gloucester, read: "Eighteen Finns from the old country arrived here Monday and it is said more are on their way."

"Russian Finns," as they were called, had already been brought in a few years before to live in the granite boarding-house at the Rockport Granite Company not far from the arched bridge. Because they couldn't speak a word of English, each man wore a tag marked "Stone House, Rockport."

The first Finns on Cape Ann came in the 1870s when seven men, dissatisfied crew members of a ship, hiked the forty miles from Boston Harbor to Lanesville because they had heard there was work in the quarries. It is believed these same men were the early Finns whose names, spelled somewhat strangely, appear in the December 1874 ledger entries for the Bay State Granite Company. That company had quarries in Lanesville and Pigeon Cove.

These men, who evidently boarded with a Mrs. Seabloom as indicated in the ledger, are given as John Lind, Erike Seike, Andrew Oya, Matthew Viahaja and in 1875, Gustaf Jacobson, who is listed as a blockmaker and as one of a group who loaded stone on the schooner *Pioneer* on January 4, 1876.

In an entry showing payment made to blockmakers, the names of Erick Nemi, John Ork, and John Laxso appear in a period from September 30 to October, 1875. Board was also paid for the men to Frank Autem. His name doesn't sound Finnish, but the men generally were sent to someone who could speak their language, so probably Autem was a Finn.

It was common practice for a quarry boss to re-christen his men on the spot when he was making out the time sheets and stumbling over the spelling of names. Instead of Raijaniemi,



Finnish quarrymen show off their hammers at the Lanesville Granite Co., about 1890.



Paving cutter Salomon Hautamaki with his chipping tub, hard at work for the Rockport Granite Co.

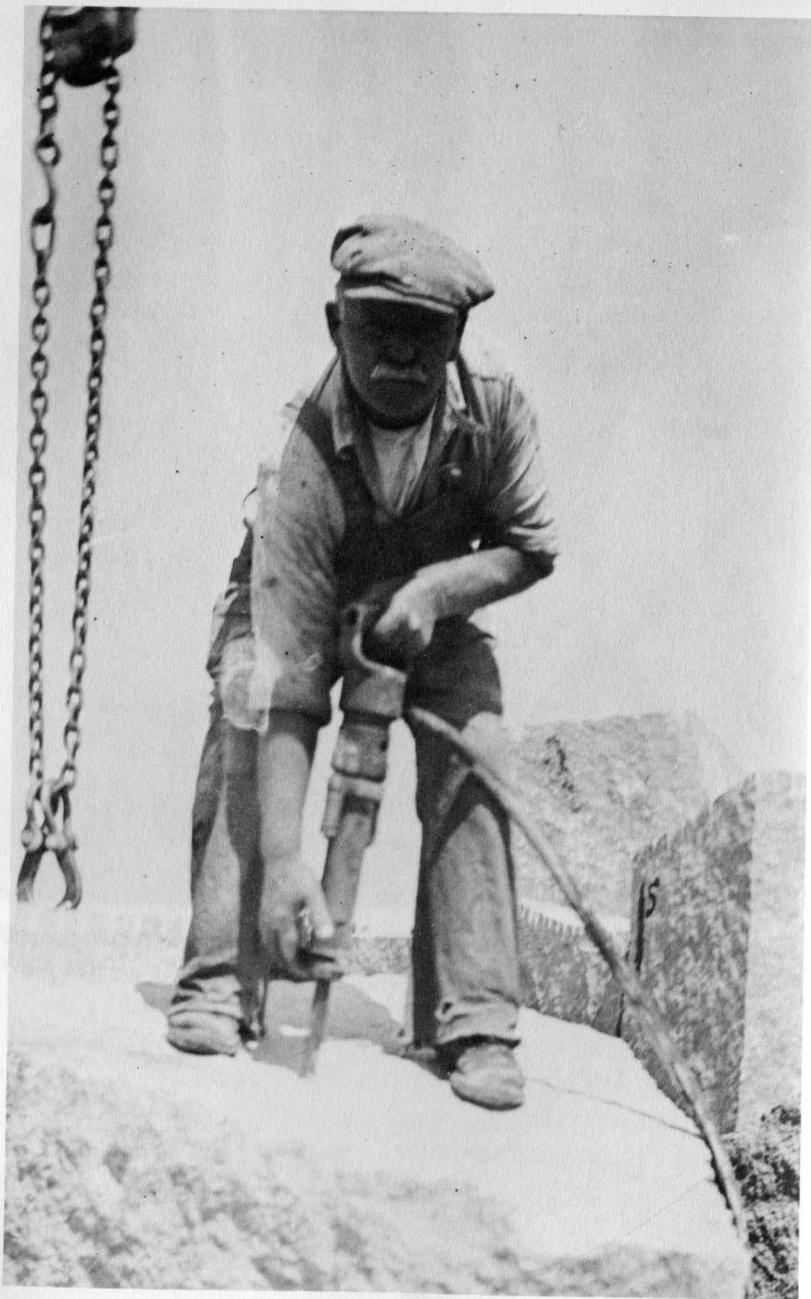


Photo from the Philip Fitzgibbon Collection
Jacob Soltti, Finnish quarryman, at Fitzgibbon quarry,
about 1902. He sometimes operated the stonecars.

he told the man his name was "Ray," for instance, and Laamu became Jacobson. Matson, Johnson, even simple Swedish names, were given to many of the men. In order to collect their pay at the window, they had to give their "new" names. Many of the last names stuck and were legally adopted. Other granite workers clung to the old, lengthy names, regardless of the number of vowels, and patiently spelled their names time after time. The name "Ojantakanen" is one of these.

Early Finnish quarry workers wore leather boots with turned-up toes, short blue coats, and neat blue pants. In no time, they became skilled in cutting stone, working with a great deal of strength and endurance to equal or surpass any strong Yankee. Finnish quarrymen made every hammer blow count. The quarry bosses agreed many times as they talked things over at the company store that they would rather have a left-handed Finn in the quarry than three right-handed Yankees. Those Finns could hammer drill holes on the most inaccessible areas while balanced on a quarry scaffolding.

Drill marks and random drill holes pepper the ledge today opposite Butman's Pit where Urjo Matson, an immigrant who became an attorney, taught new arrivals how to drill stone.

Early Finnish quarry workers were young men without families in this country. Their custom was to work hard all week, but on Saturday night, they headed for the Gloucester waterfront. They always caused some concern, because they were noisy and quarrelsome on the last trolley from town and no one knew a word they were saying. Then in April 1892 a Finn named Henry Hanka was fatally stabbed during a fight at the stone boardinghouse in Rockport on a Saturday night.

In those days the English and Welsh parents on Revere Street silenced their quarreling children by telling them to be quiet or a "Finn with a big knife" would get them.

During the years from 1892 to 1920 the Finns were drawn to Lanesville as a place to live simply in a group and enjoy their social activities much as they had done in Finland. Not many could build a house immediately, although one was built on Morgan Avenue by Matt Williams (another "Finnish" name), but was destroyed by fire in the 1940s.

One of the most unusual homes built of granite blocks by a Finnish quarryman stands on Leverett Street in Lanesville. Mr. Hjalmar Johnson worked all day in the Babson Farm quarry at Folly Cove, but at night, with four or five of his friends, he



Photo from the Alexander R. Cheves Collection
Barefoot Finnish boys near Norseman Avenue, Lanesville, in 1902.

toiled by lantern light to drill out the stone for the house. He cut down into a ledge for the stone, lifted it out with a two-man derrick, which he had borrowed, and then built the house in the opening.

By the first of April 1922, he started the last of the stone for the building, and he raised the last stone on the Fourth of July in the morning. Practical man that he was, he had dug a well in the cellar when he began so that all he had to do was extend the hand pump for water into the kitchen. He used the same pump the rest of his life.

To the continued amazement of their Yankee neighbors, Finns packed duplex houses that normally held two families with at least six—and they took in boarders besides. Even families with small farm homes took in boarders. A little house that used to stand close to Butman's Pit had only one room downstairs, and an upper room with one opening reached by a ladder. Boarders slept downstairs on straw mattresses along with the older children, and the parents slept in the upper room with the babies. In the daytime, while the men were at the quarries, the straw pallets were rolled up and stored in the upper room out of the way.

This same little house by the water-filled pit had a most unusual feature that newly arrived Finns always came to see and marvel at. One of the walls was papered with Confederate money. To those early Finns, this was just another example of American "craziness." Mrs. Matson, who lived there, saw people out in the street one day actually throwing paper money up in the air. She said, "Dear God, have all the Americans gone crazy, throwing money around like that?" (*Herra Jumala! Onko nyt kaikki Amerikalaiset tulla hulluksi, kun tuolla tavalla rahaa heittelevat?*)

Being very practical minded, Mrs. Matson rushed her children out to pick up every little piece of money. After she had pressed it flat by wetting it a little and ironing it with the black iron, she decided to paper one of the inside walls with the money. It made a good pattern and was neat.

It was at Pigeon Cove, one day in November 1894, that children returning home along the rocky shore saw many Finns "raking the sea." Their mothers, certain at first that the report was a childish joke of some kind, decided to look for themselves just to make sure. Taking rakes, they went down, too, and discovered that a schooner had tipped a load of coal inside Pigeon



Erkkila photo

Mary Laine, a Finnish woman, works at her rug loom, just as her mother did at home in Finland.

Cove's harbor during a recent storm, and the people were literally raking out all the coal they could reach while the tide was out. American onlookers, securely scarfed against the cold wind, said, "Those crazy Finns, going out in this weather and getting wet. They will all die of pneumonia!"

But according to descendants of those coal rakers, "No one got sick and no one died."

One of the main centers for the Finnish quarry workers and their families was Wainola Hall, built and looked after by the Temperance Society of Lanesville. This was put up in 1897 and became the center for plays, dances, movies, public speaking, concerts by the Waino Band and aspiring instrumentalists, and athletic programs. In the early 1930s Charles Savinen, a leader among the Finns, conducted gymnastic classes for the young people, counting out the "deep-knee bends" and pivoting to his commands in Finnish.

At the hall women held their "mat rag" cutting parties where perhaps thirty of them cut and snipped strips to be woven into cotton and woolen mats; and the first public coffee socials took place, where people came to sit around a central table by turn, having coffee and *nisu* coffeebread, then leaving silver money in a handy dish toward whatever general fund was indicated.

The Finns built their first church, now a private dwelling on Norseman Avenue, in 1891. But this proved to be so small that in 1940 the congregation bought what had been built in 1877 as a Universalist Church near the Lane School. The church, unused for many years, had served as a meeting hall and gymnasium for the Finnish Socialist group in Lanesville.

The Lanesville Finnish Socialist Society had built their own hall and office rooms in 1912, on Washington Street near the stores at the village center. All the carpenter work had been supervised by John Peltokorpi, and the chairman of the building committee was Uno I. Santti. For more than fifty years, Mr. Santti ran a shoe store and a shoe repair business in Lanesville.

The night the Socialist Society opened its hall for the first time, they presented a play "about the heartlessness of Finnish landlords in evicting tenant farmers," according to a newspaper report.

The auditorium measured sixty-five by thirty-eight feet with a twenty-foot stage. It was complete with a curtain and footlights. Floors were made of hardwood and chandeliers were

equipped with "eight electric lights, each one 60 candlepower."

The main entrance was off Tucker Street on the west, where a flight of stairs went to the second floor. The door facing Washington Street on the front was used for people going to the first-floor offices.

When their hall was destroyed by fire, the Socialist group were without a meeting place except for each other's homes until they acquired the unused Univeralist Church. By the time the Finnish Church, re-named the St. Paul Lutheran Church, had in turn bought the building in 1940, the Socialist Society had died out in the village.

One of the most famous Finns to come to Cape Ann to work in the quarries was Antti (Andrew) Syrjaniemi, a Pigeon Cove cobbler and musician. He wrote songs about Cape Ann doings among the Finnish people—all the news from home whenever there was a gathering. He was always the feature at Wainola Hall or at the summer festivals at the grove.

Antti, when he finally opened his own shop, would be repairing a quarryman's shoe when he suddenly thought of a melody or had an idea for a comical verse. So he would set down the shoe and scribble on a pad pulled from his pocket.

One of the most famous records he made with Victor in New York tells about the surprise party or "Hammastys Kekkerit." In a rollicking, falsetto voice, Antti tells how the Finnish ladies of Lanesville hurried about house-to-house, collecting money for a surprise gift for one of their people. Antti mimicked the fellow who accepted the gift, only to break down in sobs because he couldn't remember his carefully rehearsed speech for the "surprise."

Antti wrote and sang about Lindbergh's flight to Paris. He sang another song, "The Merry Widow"; also, "Happenings of the Day," "Mrs. Schneider," "Haapajarvi Polka," and a fast melody about a Rockport tag dance where the floorboards of old Town Hall smoked from the fast dancing. Another song, "Back-seat Driver," was a tribute to the family car.

Finns have always liked music, and one of the first things they did was to send their children to a musician for lessons on band instruments. Girls were taught violin, piano, or accordion. Finnish immigrants who couldn't speak any English formed the first Waino Band sponsored by the Temperance Society. Their children and grandchildren grew up to sit with them as they played concerts in front of the hall on summer evenings. Some-

times the entire band traveled by streetcar and later by bus to Rockport to give a concert at Town Hall, or they rented a horse-drawn open wagon, called a barge, to travel to Gloucester.

Everyone who liked band music found an excuse to be down on Langsford Street when the band rehearsed on Sunday mornings under the big oaks outside. A fringe of delighted children were always there, barefooted in the summertime.

Nationally known musicians came out of that early band. It was conducted by a Yankee named Charlie Glover, who was a quarry foreman. John Jacobson played trumpet and became a band conductor himself; his brother Andrew mastered the saxophone and clarinet to play with the John Philip Sousa Band. Otto Walkama played trumpet with the U.S. Navy Band, and Sylvester Ahola, who lives in Lanesville, can still play jazz trumpet or concert music just as smoothly as ever with the high, clear tones that he always produced when he played in London at the Mayfair Club or for Robert Armbruster's Orchestra over New York City radio. Many of Sylvester's old records are being re-discovered by jazz fans, who regard a recording with any fragment of his trumpet playing a rare find.

The professional accordionists, the Niemi Sisters, Antti's two daughters, played together for years, appearing in some of the best night spots along the North Shore.

When the Jacobsons and Sylvester Ahola were young men together, they used to row out in a dory and anchor off Lane's Cove opposite where the Canney Railway dumped grout. There they played an impromptu concert just as the sun went down.

The custom of the Saturday sauna or Finnish bath is one that people all over this country have adopted. To those early Finnish quarrymen, the sauna was so important that many times the bathhouse was built before the house was begun.

The bathing ritual, for it is almost religious in its observance, dates back in Finland to obscurity. Finns have always believed that *sisu*—that extra stamina they seem to have more than other people—comes from taking the sauna faithfully.

The sauna building, usually a short distance from the main house, was small and often consisted of two little rooms. The outside fireplace connected to the bathing room, which was finished in smooth pine boards. Inside was a huge water barrel, heated with an arrangement of pipes set in over the fireplace. Above the fireplace was the *kiuas*, a collection of hand-picked

grapefruit-sized stones from the beach. These were usually of black granite, for they heated quickly and stayed hot longer than gray granite.

On the opposite wall were the bathing benches, usually two or three above each other, bleacher fashion, so that people could sit comfortably as they "took the heat."

Early Finnish saunas had no chimneys and were called "smoke saunas." It is believed that the first public sauna, a smoke sauna at Folly Cove, was built by a man named Seppala. Up in the woods, an old-time Finn named Gusti Stenberg built a smoke sauna about 1915 that is still in use. Gusti puttied in squares of amber-colored cathedral glass instead of ordinary window glass. He was an artist at heart, but he was being practical, too. He had salvaged the glass along with a load of lumber from the Portuguese church that had been destroyed by fire in Gloucester six miles away.

Over the stone wall from Gusti's place was a big double public sauna with four dressing rooms, built by John Pelto-korpi, the same carpenter who built the Socialist Hall. For his sauna water he constructed a creaking, thumping windmill to run the water pump. Each person paid fifteen cents and brought his own towel wrapped around clean underwear in a shipshape bundle.

The women usually started heating the sauna early Saturday morning, and more often in the summertime. First they burned light brush, watching it carefully for sparks; then they put on heavier wood. When after about four hours, the water in the barrel bubbled and boiled, they skillfully raked, turned, and fussed over the wood ashes so they would glow behind the closed iron door and hold the heat below the stones. Careful raking also insured against having any irritating smoke or *haka* in the sauna.

Just before the sauna was pronounced ready, the women poured a dipperful of well water on the red-hot stones with a resultant whoosh of air and heat. Then the damper was closed, benches wiped off, buckets set in place for bathing, and bundles of birch switches hung handy to the bathers. These *vihtas*, or birch branches, had been soaked overnight.

Outside, the cap on the chimney was set down over it and weighted down with a rock. Then the iron hatch cover hiding the *kiuas* full of hot stones was removed.

Veteran bathers perched on the top shelf, taking all the



Mrs. Ida Stenberg superintends heating one of the last smoke saunas on Cape Ann, located on upper High Street, Lanesville.

heat they could get from the water they poured over the hot stones. A small dipperful was usually plenty.

An old-time Finnish man named Enochi Hill could take more heat than anyone on the Cape. They always said he had plenty of *sisu*, even in the quarry where he could hammer longer and harder than anyone else. Dipperful after dipperful he dashed the water against the hot stones, relaxing contentedly on the top shelf. After the first two blasts of heat, his companions were always driven to the bottom benches, where it was a lot cooler by comparison.

Bathers switched themselves with a *vihta* when they had begun to perspire enough so that the water poured off their noses and chins. They dipped the birch branches in hot water, then laid them for an instant on the hot rocks. Next they flicked them or switched them over tired muscles, especially up and down their backs.

At this point, many ran out and jumped into a handy quarry pit filled with water, or if it was wintertime, they ran outside to roll in the soft snow, yelping with tingling delight. Then the sauna ritual was continued, finishing with washing up on the lower benches, and a final rinse with buckets of cool water from a separate barrel.

The final step was to dry off in the little room next to the main sauna. This room was never heated, and even in the dead of winter, no one ever noticed the cold. Drying-off time was never hurried, partly because clothes just stuck to their bodies if they dressed too soon.

When it was time, the bathers returned to their host's kitchen to drink coffee and eat a few pieces of sugared *nisu* coffee-bread. This bread, baked in a braid, became a favorite of other nationalities who tried it.

There were at least thirty saunas in Lanesville from about 1920 to 1930, but as the old people have died and homes have become modernized, people seldom build their own saunas. Five saunas in the village today are heated regularly, and two of them are public.

IX

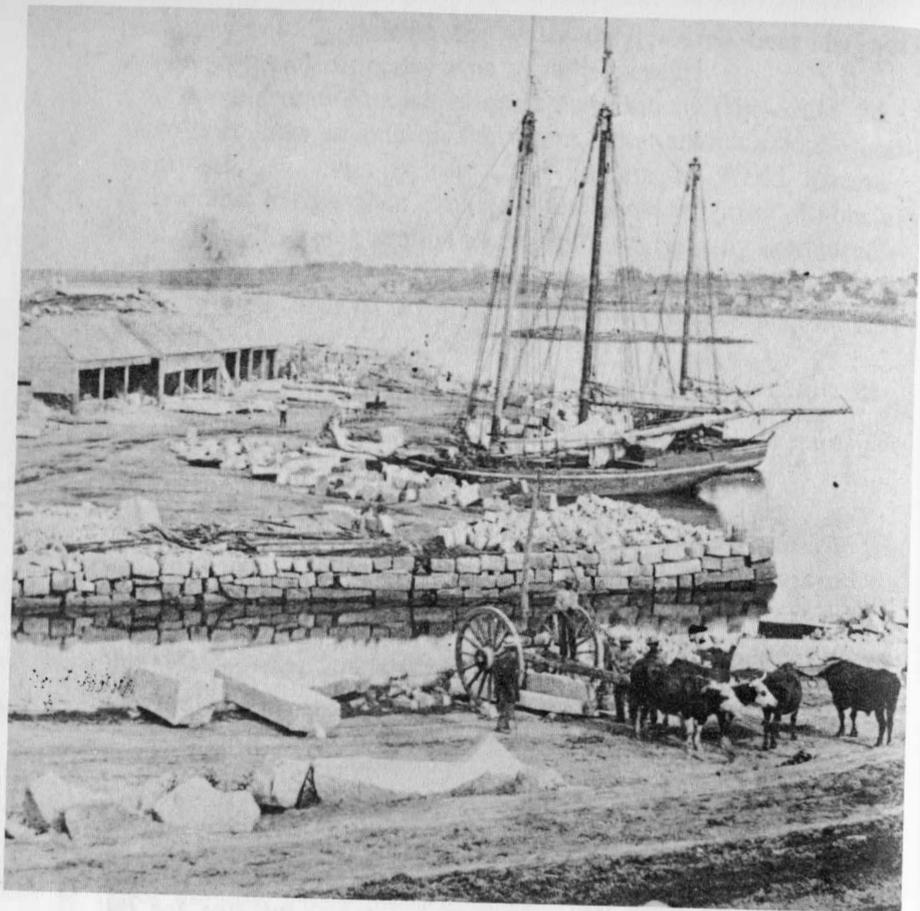
In 1826 William Torrey came from Quincy with Major Bates, the stone dealer, also from Quincy, to see what quarrying possibilities there were on Cape Ann. Mr. Torrey noted the loads of "ledge" going from the seaside hills down to Knowlton's Wharf for Preston & Fernald Company, and the volume of business encouraged him to begin his own.

For a long time, Mr. Torrey quarried and shipped to Major Bates. At that time, granite was needed for all the building going on for the islands of Boston Harbor. Quincy quarries were furnishing part of the stone, but the major portion of it was being shipped from Pigeon Cove and Rockport by boat.

After quarrying a ledge in Pigeon Cove, Mr. Torrey worked for a year, beginning in 1827, at Folly Cove on part of the Samuel Lane farm, cutting capstone and flagstone close to the water's edge. He was sending out granite also for the Charlestown and Portsmouth Navy yards.

In 1831 he quarried thirty-foot high ledges alongside the road where No. 100 and No. 102 Granite Street are today. His main quarry was just west of the present stone bridge in Rockport. In 1836 he owned six sloops and had erected the first derrick ever seen on Cape Ann. After his death in 1859, his son William carried on the business, concentrating in Bay View, where his father had gone into business with Beniah Colburn in 1853.

Beniah Colburn came from Wentworth, New Hampshire and worked for Mr. Torrey for a while. From 1829 until 1833 he quarried Old Pit near Pigeon Cove Chapel, but his main quarrying in Rockport was in partnership with Ezra Eames of Holliston, Massachusetts. One of their first jobs was to furnish granite for the chain bridge over the Merrimack River. They



Rockport Granite Co. had three cutting sheds on Granite Pier before 1880. Oxen and garymander in foreground.



Photo from the Foster Collection
Sixteen-ton granite column in the rough being loaded in 1917 at Bay View wharf by the Rockport Granite Co., for shipment to East Boston. From there it would travel by rail.

worked their quarry to the tidewater, and then had to leave it.

In 1832 Colburn and Eames quarried the seaward end of the land near No. 137 Granite Street, and they quarried another section on the seaward side called Little Pasture, previously owned by the Wheeler family. It was not far from the Federated Church on Granite Street.

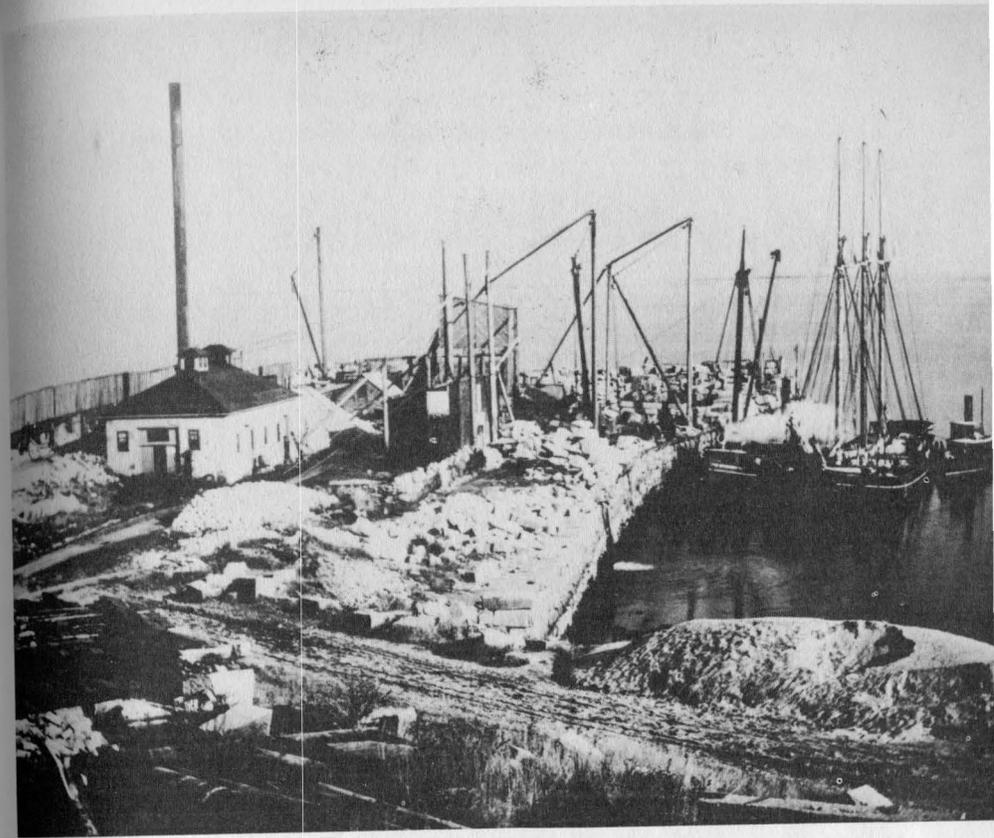
The granite company that first began the great Granite Pier now owned by the Town of Rockport was the Gloucester and Boston Granite Company operated by Zachariah Green and Jeremiah Wetherbee in 1830. They owned land and quarried on both sides of the present stone bridge, building the stone house at No. 87 sometime between 1830 and 1840. All this property became the main section of the Rockport Granite Company in later years. In 1830 Wetherbee was in business with William H. Jordan, but it is believed they worked together for only a year.

About 1830 also, John Stimson, a son-in-law of Zachariah Green, came to Rockport where he also owned stock in the company. It was while he was there that he built the granite barn and put up the first pair of heavy-timbered hoisting shears ever used in the quarries. After a few years he left the Gloucester and Boston Granite Company and began quarrying at Flat Ledge. It was from this quarry that he made his famous shipment of paving blocks to Fort Warren.

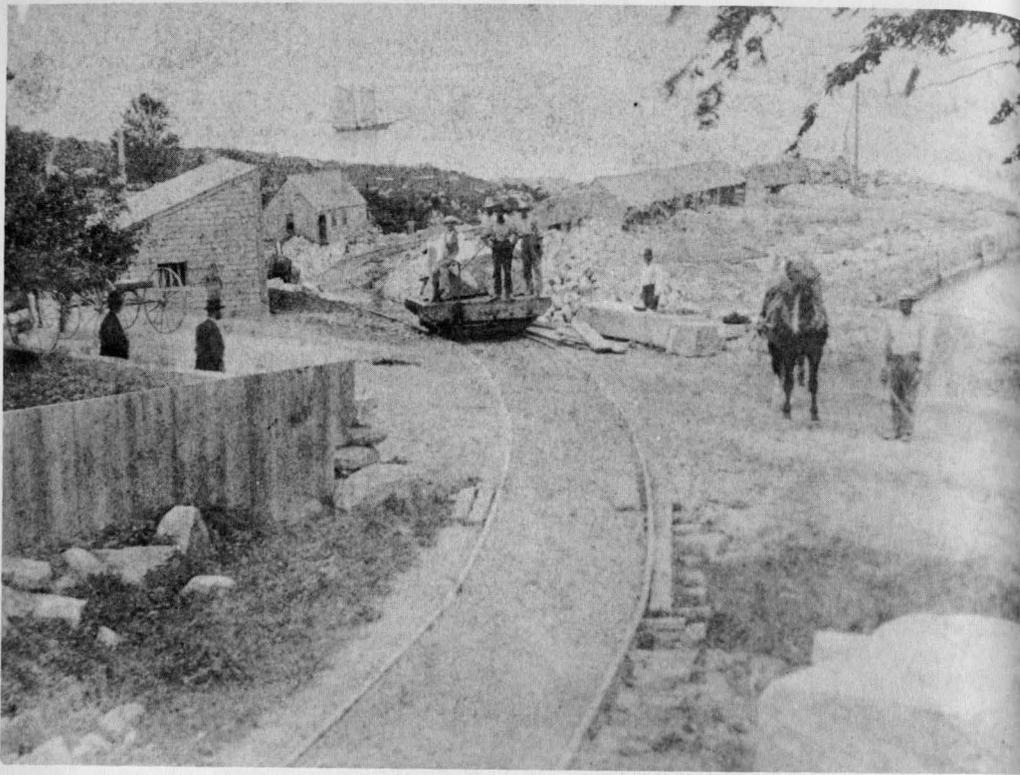
In 1834, Eames, Stimson & Company was organized, consisting of Ezra Eames, John Stimson, and Beniah Colburn. They continued to quarry at Flat Ledge, but had quarries in Lanesville and Bay View as well.

About 1845 Mr. Stimson bought out Ezra Eames, Beniah Colburn, and new partners William J. Torrey and Joshua Sanborn. The latter had worked as a foreman for Mr. Torrey when he first came to Rockport. In 1854 Stimson rigged up the first steam pump, the design for which was brought back from the California gold fields by Lewis Lane of Cape Ann. Other partners in Stimson's company over many years had been Anson and Aaron Stimson, George R. Bradford, J. Henry Stimson, Abraham Day and Jotham Taylor of Lanesville.

A leading granite company of its day was run by Samuel Parker and his brother William, who were in business in Rockport prior to 1830. They built the stone house in 1838 at No. 101 Granite Street. Parker was a blacksmith from Hollis, New Hampshire. The company's quarry pits in the hills, still called Parker's, Little Parker's and Steel Derrick (Upper Pigeon Hill



Pigeon Hill Granite Co. wharf and powerhouse at Pigeon Cove. Note heap of stone dust in right foreground, *circa* 1890.



Inclined railway ran from Steel Derrick Pit, Pigeon Hill Granite Co., to their wharf, crossing Granite Street, the main highway.

quarry) were to become the main quarries of a big new company.

The Pigeon Hill Granite Company was formed in 1870 by George R. Bradford, Anson Stimson, Amos Rowe and Levi Sewall, the last two named old-timers in the granite business. Later Frank Scripture joined the business, and at one time the Parkers were part owners as well.

One of the great things the Pigeon Hill Granite Company did was to complete an inclined railroad from their two big pits, Upper Pigeon Hill (Steel Derrick) and Parker's, down to their new breakwater and pier constructed on Colburn's Point just below Granite Street.

The newspaper of the day called the railroad a "gravitation road" and predicted that many cars would hurtle into the sea as they went down the steep incline with loads of stone.

In April 1874 the company was setting in the rails of the new railroad, and they seemed to have opened the road shortly after that without any fanfare. A flagman was stationed at the street to warn people that a stonecar was about to cross, ascending or descending.

Dan McIsaac was the brakeman on the Pigeon Hill Granite Company railway. A tall man, six feet at least, he was powerful enough to hold down the bar brake going downhill. Coming back, Alex Burke, a teamster, guided his big horses to pull the empty cars to the quarries once more.

It was in February 1875 that a stonecar high up near Upper Pigeon Hill Pit, not far from the cutting shed, rammed into an empty car ahead of it, sending the second car forward with a terrific spurt. It broke its brake and hurtled down the hill, shot across Granite Street, and zoomed clear to the end of the wharf. There it leaped thirty feet into the air and fell with a tremendous splash beneath the surface of the water.

Many huge granite blocks fell off the cars, especially in that section where there was a slight dip below Granite Street on the way to the wharf. Sometimes the men came down and drilled the blocks, breaking them up on the spot to a size that could be lifted. But most of the time they left them where they fell. Many of those old blocks have been incorporated into house foundations built in that vicinity later on. One measures thirteen and one-half feet by five feet and is twelve inches thick.

Most of the granite from Upper Pigeon Hill and Parker's was quarried for the Sandy Bay Harbor of Refuge project, a

huge breakwater that was begun in 1885. The Pigeon Hill Granite Company shared the contracts with the Rockport Granite Company, its competitor. But there were other contracts through the years, many of them unknown today because they were unrecorded, for example, a contract for a 22-foot high 24-ton monument for Albany, N.Y., which was sent out in two railroad cars from the Rockport depot in 1878.

All the granite for the Charlestown (Massachusetts) High School, came from these two quarries, as did the granite for the Bradford Memorial Chapel in Gloucester; part of the granite for the Union National Bank, Pittsburgh, and the Chelsea viaduct over the Boston and Maine Railroad at Mystic Wharf.

The formal granite work on Star Island at the Isles of Shoals off Portsmouth, was done at the Pigeon Hill Granite Company. In the summer of 1914 they were working on the forty-seven-foot high obelisk that was to be erected to the memory of the Reverend John Tucke. He died in 1773 after ministering to the people on the Isles of Shoals for more than forty years.

In order to move all the stone once it reached the island, five heavy draft horses were brought by the steam lighter *William H. Wood* from Pigeon Cove. Stalls for them had been built on deck so the horses would be safe and easily controlled.

Upper Pigeon Hill quarry measured eight hundred by four hundred fifty feet in 1923 and was reported to be fifty to one hundred feet deep. The granite at both pits is a medium gray shade with a slightly bluish green color to it. Parker's Pit measured six hundred twenty-five by seven hundred by five hundred feet across. It was forty to eighty feet deep.

Steel Derrick, the Upper Pigeon Hill quarry, is one of those that has wooden derricks completely submerged in it. These were used to move stone from off the lower ledges in the deep part of the quarry to a place where their main derrick could reach and lift them completely over the rim.

Before the installation of the one hundred ten-foot steel derrick in the early 1900s, two wooden derricks were in the big pit, and it also had two blondin towers, one on each side, with cables that dropped down. Pulleys and chains hung from them to the bottom of the quarry.

The late John Caffrey of Pigeon Cove, a wiry little Irishman, said he painted the steel derrick once. Heights never bothered him. He had some fun one afternoon as he hung high

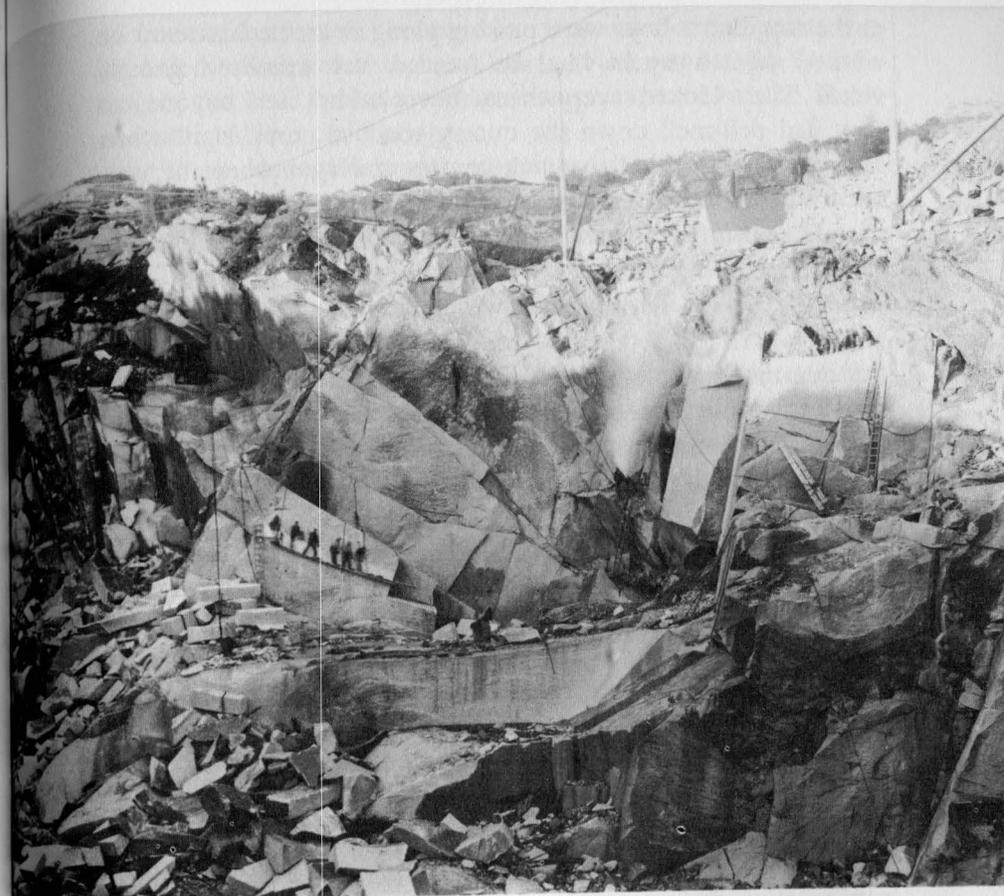


Photo from the Rogers Collection
Pigeon Hill Granite Co. Steel Derrick Pit, taken about 1906, showing blondin on upper left. See text on page 54 for source of word "blondin."

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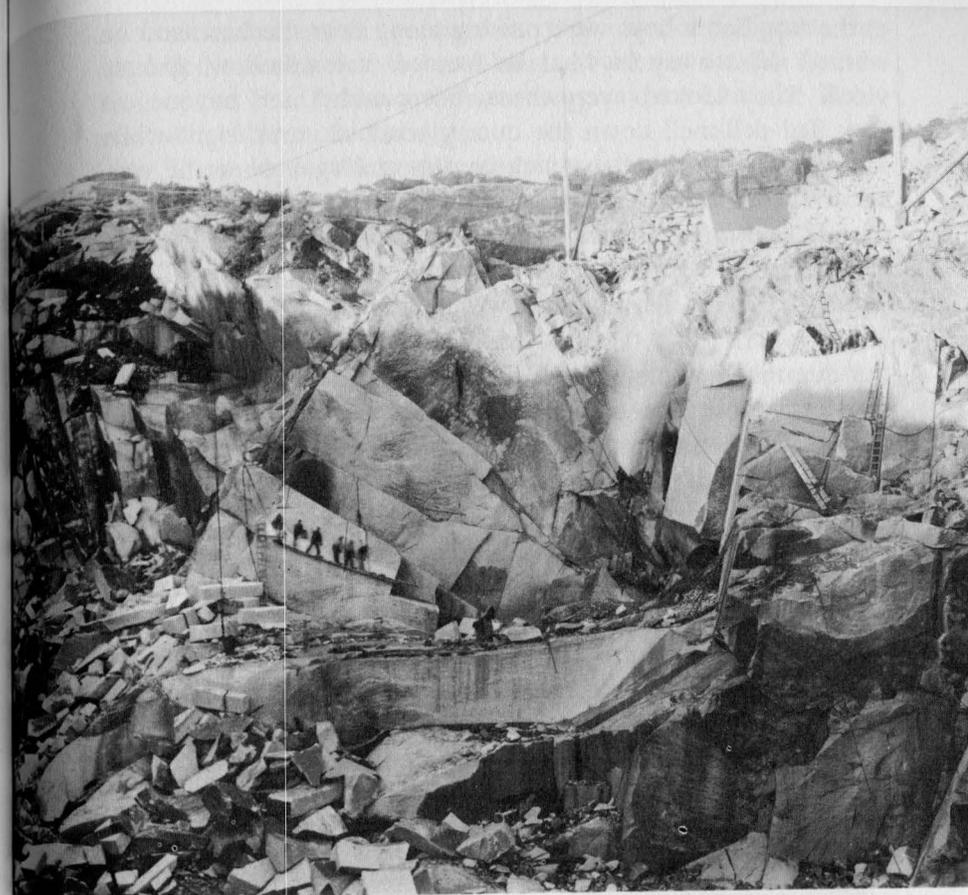


Photo from the Rogers Collection
Pigeon Hill Granite Co. Steel Derrick Pit, taken about 1906, showing blondin on upper left. See text on page 54 for source of word "blondin."

at the top. Some boys were passing along near the base and he warned them away in what he fancied was a hollow, ghostly voice. They looked everywhere, but couldn't see anyone, so they fled pell-mell down the quarry road in great fright while Mr. Caffrey chuckled so much he almost forgot where he was.

When the man at last inched down from the derrick, his friends said, "Gee, Caffrey, didn't you mind the height?"

"Naw," he replied, "what a view up there!"

In April 1877 they had what was called a "seam blast" in the quarry. It was supposed to be routine and the men were standing at what was considered a safe distance, waiting for the touch-off. When the blast came, a hundred-pound sheet of stone was blown off the rock's surface. It flew with deadly aim toward the men and killed outright an Irish workman named Hennery. No one had ever seen a freak blast like that one.

In October 1884 the Pigeon Hill Granite Company was building a new blacksmith shop and new shelters for the paving cutters who worked on the wharf. At the same time, new paving cutters' bunkers were being put up at the cutting shed where the upper track leveled out slightly in its pitch to the sea.

The company also built its store in May 1872, near the schoolhouse on Granite Street just beside the railway. Here they sold everything from a half pound of bologna to a garden hoe. A little building on the side housed the grocery wagon and made a stable for the horse.

The cold January weather evidently bothered someone very much in 1875, for the company store was robbed, and the only things taken were items needed for a zero day: warm drawers, a pile of them; cigars, mittens, and boots.

The Pigeon Hill Granite Company continued in business for forty-four years and was the last company to be swallowed up in the big Rockport Granite Company's growing holdings. They had always been competitors, even though they shared some contracts. It was on November 25, 1914 that the sale agreement was made and the Pigeon Hill Granite Company went out of existence. But their holdings—their equipment, the quarries, and their wharf were used for years by their new owners.

When Yankee stonecutters at Pigeon Cove and elsewhere on the Cape heard the news that Irish immigrants were coming

to work with them in the quarries, they were so indignant they exploded a series of charges of black powder under the foundation of the little house and barn being prepared on the Rockport side of the arched bridge.

Those stonecutters were convinced they would never welcome an Irishman in their midst, and they rained rocks down on the "Irish House" whenever they got a chance.

The first Irishmen who came were named Brown, Breen, Kaples, and McNeirny. They were employed by Eames, Stimson and Company about 1836.

"The second colonization of New England" is what historians have called the coming of the immigrants from Ireland—those who fled the continuing potato famines. Somehow they knew they would make a better life in this country, even though it was in a quarry hole of gray stone—hot in the summer and knife-blade cold in the winter.

Many more Irishmen came to work in the quarries in the late 1840s, close on the heels of the first four. Among them were the family names of Heaphy, Cunningham, Foley, Powers, Bohan, Drohan, Hamilton, Whearty, Cusack, Barry, Murphy, Higgins, McCormack, Hanrahan, Flynn, Cleary, McCarthy, Shea, Daley, Holloran, Fitzgibbon, Collins, O'Sullivan, Bresnahan, and Caffrey. By 1860 there were also Gallagher, Kennefick, Lenahan, Shean, Trahy, Mahoney, O'Donnell and Diamond.

John Erwin, one of the early Irish, lived at 7 Woodbury Street, in Lanesville. He and many of his friends came to Cape Ann from County Cork, sailing to Boston in 1854 on the ship *Great Cathedral*. The passage over took thirteen weeks and three days. "Of the seven hundred forty passengers, only two hundred landed at quarantine in Boston, for the others had died of ship's fever and the rough conditions," Erwin said.

Patrick Daley owned the first house "back of the Cape" bought by a Catholic. Later, Irish families lived in groups of houses, handy to each other, so that they were said to be living in "Dublin."

"Great-aunt McNeirny," the head of her family and one of the first arrivals of the Irish colony, lived in Bay View. One day while she was drawing a pail of water from the well, a neighbor shyly greeted her and then said with a serious look, "I hear the people in that house over there have green horns."

Taking off her wool bonnet, Great-aunt McNeirny sup-



Photo courtesy Catherine McDonald

Here is the entire McNeirny family of Bay View, some of the first Irish immigrants to the quarry area of Cape Ann.



Laying the cornerstone of St. Anne Church, Gloucester, May 25, 1876. Granite came from Pigeon Cove for this huge edifice.

pressed a mischievous giggle and said, "Well, I live in that house. Do I have horns?"

It wasn't long before the Yankee stonecutters came to admire their Irish fellow workers for their lightness of speech, their quick laughter, and their love of a good time dancing or just talking together. But they never did understand their religion.

Beginning as far back as 1849, Father John McCabe and Father Thomas Shahan of Salem regularly took turns riding down twenty-five miles to Rockport on horseback over the paths and rocky country lanes to the Irish House where they said Mass. For months, as Mass was said, people all ages tried to peer in the windows, it was such a novel sight on Cape Ann.

The priests took turns staying with a family in Pigeon Cove or in Bay View. Most of the time they heard confessions in the evening on arrival, and then said Mass the next day.

In order to attend St. Joachim's church in Rockport after it was built in 1856, the Irish hiked over the quarry paths through the woods. Many carried their shoes in good weather, slipping them on just as they reached the main road in order to save wear on the valuable soles.

After the Civil War ended the number of Irish was in the many hundreds. A village hall became available in Lanesville, where the priest came to say Mass once a month. This custom was kept up until the parishioners built their own church in 1876, the Sacred Heart, with its twelve huge stone steps, all hand-hammered by Irish granite workers in their spare time.

The great Gothic Church at Gloucester, named for St. Anne, was built with Pigeon Cove granite in 1876 and dedicated in 1881. Its one hundred eighty-foot high spire used to be matching stone, but it was taken down and replaced with a stainless steel spire in 1963. The outside of the church measures seventy-eight by one hundred forty-two feet.

When the tower was repaired, the chips of granite that fell were compared to stones from quarries on the Cape and they matched perfectly the stone taken from the Pigeon Hill Granite Company quarries. This granite has a slightly bluish cast.

Edwin C. Canney began his Pigeon Cove granite business sometime in the early 1880s, when he purchased quarries and land from James Edmunds. His main quarry at Pigeon Cove

still exists with its sheer walls—just behind the office of the Cape Ann Tool Company.

It was mostly during 1893 that the Canney Company steamer, the *Margery*, used to toot as she approached her anchorage in Pigeon Cove Harbor. Every time she was answered with a friendly blast from the quarry whistle. It wasn't long before the engineers in all the quarries, all the way up Sheep Pasture on the hill, blew their whistles in a chorus whenever the *Margery* announced her arrival. Each engineer tried to be the first to whistle a welcome.

On February 11, 1895, Mr. Canney sold all his holdings at Pigeon Cove and Babson Farms in twelve parcels to the Rockport Granite Company.

The matching quarry pit next to Canney's in Pigeon Cove is Mason's Pit, where young people swim. It was operated by Mason and Ballou about 1870 and continued by them until 1878.

In September 1870 one of their quarrymen was badly injured. He was struck on the back by a large rock as it was being lifted out of the quarry. The impact threw him forward and he might have escaped injury, but there was a second big rock directly in front of him. The moving rock pushed him against the second rock so that his leg broke in the upper thigh. This was one of the major accidents at Mason's Pit, but, as in other quarries, burns due to premature explosions of black powder, were also an ever-present hazard.

During the last week of November 1872, Jesse Sargent, a man from Maine who worked in Mason's Pit during the summer and fall season had just packed up to go home and was making a final trip to the quarry to pick up his pay from the quarry boss. Just as he passed a large rock, a charge of black powder blew. Luckily, his injuries were mostly to his left foot. When the blast came, his fellow stonecutters thought he had been killed.

From Mason and Ballou, the company name changed to Clapp, Mason and Ballou. Then in later years they were known as the Pigeon Cove Granite Company. Under this name they also operated a quarry on Atlantic Street, West Gloucester.

Out of Mason's Pit came stone for Boston streets and sidewalks for South Boston and for Charlestown. In 1872 they sent out all the granite for the jail at Taunton, Massachusetts, which was a \$12,000 contract.

In 1876 it was reported the company had three hundred men working, counting their West Gloucester plant, forty-five of whom were stonecutters. Twenty-two vessels had moved in and out of the harbor to carry their stone. They shipped finished stone for the West Chester Park Railroad Bridge in Boston and the West Chester Bridge, the Swett Street Bridge, and the South Boston flats seawall, which was nine hundred feet long, forty-five feet wide at the bottom, five feet wide at the top and thirty-nine feet high. By 1877 the company was in financial embarrassment, the newspaper said, reporting that it owed \$145,000, a lot of which was due them from state contracts for which they had not yet been paid.

When their holdings were finally auctioned in 1878, Moses Knowlton bought a dwelling house on the beach; John Stimson purchased one of the garymanders and Henry Pingree the other. Stone carts, wagons, a store building, derrick, and engine on the wharf plus a quarry derrick, hoisting engine, two steam rotary pumps, a small wharf derrick, and two large quarry derricks were purchased by John Fears. Isaac Harris bought one stone cart for fifty dollars.

Both medium-size quarries and small motions were all the way up the narrow winding street, now Pigeon Hill Street, that used to be called Dade's Avenue. That area of Pigeon Cove is still called Sheep Pasture, but by 1850 only a few houses remained and quarrying was the main occupation of the Swedish people who came there to live and build their own homes.

George Umlah and his wife kept a boardinghouse in the 1870s for a lot of the men who worked in the quarry. Mr. Umlah ran the quarry that is now behind No. 73 Pigeon Hill Street, about two-thirds of the way up the last stretch of hill. Just below this pit, on opposite sides of the road, there used to be two motions known as the Bluff, where later the boys swam; and on the right-hand side, the shallow Girls' Pit. There is now a house built entirely of granite taken from this pit in which its foundation is set.

At the top of the street in the woods headed toward the big Leonard Johnson Pit now operated by the Providence Granite Company, are two pits called the Queen and the King. They are used for skating and swimming.

Most of the quarrymen, for the most part motion operators, credit Ezra Eames for buying the blocks they cut during the season. They called him the "King of the Sheep Pasture."

Another medium-sized quarry in Pigeon Cove was that of Silas Wait and Ezra Eames, in existence in 1868. In May of that year, Mr. Wait and a granite cutter named Patrick Ahern were badly injured when a charge of black powder blew. Wait had his face bruised badly from rock fragments and he was hit in other parts of his body. Mr. Ahern was badly hurt, too. Again, the men marveled that they lived to tell the story.

In October 1878 a chain suddenly broke free, releasing a giant block. It thundered down on the ledge below, but fortunately it didn't roll. Instead, it landed flat in a cloud of stone dust and flying stone chips. The earth shook under the men's feet as high up as the rim on the quarry.

The Eames and Wait's quarry derricks and tools were auctioned in May 1880. The engine was sold to William Parker for the Pigeon Hill Granite Company. Three derricks were bought by Charles Cleaves; a garymander went to Nathaniel Webster, and the blacksmith tools were bought by the Lanesville Granite Company.

Mr. Cleaves was still in business in 1895, for he shipped thousands of paving blocks to New Jersey on the schooner *Katie J. Hoyt* out of Pigeon Cove.

Another quarry had been begun at Sheep Pasture in September 1884, when Mr. Dorman and Mr. Umlah purchased a smithy and shed that had stood on the wharf near the Union Store and had them moved to their new quarry location in the pasture. Mr. Dorman was the blacksmith who had a quarry in 1836 on Granite Street, on land that was part of the Wheeler family's Old Pasture. That year, 1836, Mr. Dorman was in partnership with Reuben Curtis and Frederick Ballou. They bought their land from Benjamin Hale.

Mr. Dorman also had been associated in 1878 with another group of men headed by A. C. Pierce, who began a quarry near Mr. Pierce's home at Pigeon Cove. The others were George Day, Enos Mayo, and Edmund Fitzgerald.

At Squam Hill, John Manning's quarry was operated until August 1877, when his twenty-three acres of land and buildings were auctioned. The property was bought by Mason, Ballou, Pingree, and Mayo.

In January 1895, a dozen little schoolgirls had a close shave at Rat Pit off Curtis Street. They had just passed under the derrick and its guy wires when the huge structure toppled over, pulled down by an oversized stone the engineer was at-

tempting to raise out of the quarry. A Finnish man named Luhti broke his leg, but that was the only injury. He was sent to the Massachusetts General Hospital on the evening train, as was the custom in those days. Other than being frightened by the noise of the derrick falling, the girls were all right and hurried on their way to the nearby school to tell their teacher of their narrow escape.

Most of the first Swedish quarry workers lived on Pigeon Hill Street or on the avenues close by. The first man to come from Sweden to Pigeon Cove was Peter Magnus Lilja, who arrived in 1879. Another Peter Magnus Lilja, no relation, came just before 1890.

Most of the Swedish people came from many different villages in the old country between 1880 and 1900. And it was the promise of work in the quarries that seems to have attracted them to Pigeon Cove.

Near the top of Pigeon Hill Street lived Carl Carlson, then came John and Andrew Pearson. Frans Linder came next. John Sten and Alfred Gustafson built houses on Pigeon Hill Court. John P. Erickson was next. He had been injured in a quarry accident, and the Rockport Granite Company helped set him up in business. He kept a small store on the street for many years, stocking such things as Swedish patent medicines along with groceries.

Charles Johnson came next. He was a quarry superintendent at Bay View and a brother to J. Leonard Johnson, the quarry operator. Then came Emil Anderson and Ben Anderson, both of whom worked for the Rockport Granite Company. Hjalmar Swanson lived in the next house, and beside that was the home of Carl Ossian Carlson, a quarryman.

Around on Curtis Street lived Carl Strandal and Benjamin Swanson. Andrew Peterson also lived on the hill. He operated the two motions that became the King and the Queen quarry pits, employing as many as twelve paving cutters one winter when work was scarce elsewhere.

The Swedish people kept in close touch with each other and observed many traditional customs, especially at Christmas-time when they presented their smorgasbord, a tableful of dozens of foods Pigeon Cove had never seen. One of the most anticipated treats served at the smorgasbord was the home-made sausage and pressed meat, for each family kept pigs to butcher in the fall just so they could have these meat specialties.

Another feature of the Christmas Eve smorgasbord was the rice pudding. A single almond was baked in it, and the one who found it in his serving was supposed to be the next one to marry.

One family's Christmas custom included the arrangement of a miniature village brought from Sweden. Nels Falk, who came in 1888, always carried it down from the attic and set it up on a large wooden door he had brought into the livingroom.

Their Christmas day service in the churches was at 5 o'clock in the morning—families in sleighs coming from Lanesville and Rockport, and everyone else walking in the pitch dark.

Within the period from 1893 to 1895, three Swedish churches were built in that small community, only a few minutes walk from each other. Volunteers did the construction. They are private residences today. Even the little Lutheran church on Pigeon Hill Street was moved to Stockholm Avenue in 1949. For years the members tried to keep it going, opening it for special services and weddings, but they finally had to give it up.

In addition to the fellowship found in the churches, the Swedish people in the cove belonged to Spiran Lodge, Royal Order of Vasa, begun in 1906 by J. Leonard Johnson. Beginning in each other's homes, meetings were finally held in their own hall on Broadway in Rockport. There they have had socials, concerts, lectures, and dances. Besides offering a social outlet, membership in the lodge entitled the quarrymen to sick benefit insurance, and this appealed to the immigrants.

The Swedish people particularly liked music and just before 1895 formed the Columbia Brass Band led by Charles Hjerne. They had bright red and blue uniforms. One January morning, at 5:30 that year, the entire band arrived to serenade the leader where he lived at Mrs. Johnson's boardinghouse. It was a decided success. The leader was pleased, and Mrs. Johnson had been forewarned, so she was able to serve a big breakfast that went on until noontime.

Years later, when another band took the place of the old Columbia, the discarded uniforms were neatly gathered up, cut into strips and braided into bright rugs by the women.

The first-generation members learned Swedish in the Sunday Schools of the churches they attended, but since then there

has been no general teaching of the language except for a few private language classes offered for those who travel.

It is said that there was a school for little children in the Lutheran church, where they were taught English. This school was finally outgrown and the Reed School, built by the Town of Rockport, took its place.

The Swedish people in Pigeon Cove were stone workers, but as early as 1868 it was reported in Gloucester that one thousand Swedes lived in that town who went fishing and were a "worthy class of citizens."

X

The Rockport Granite Company was formed on August 4, 1864, in a move that actually began the granite empire that spread throughout Cape Ann until the name of the company became known internationally. John L. Stimson was the leader in the move to form a new company from the old Eames, Stimson and Company. Ezra Eames was elected superintendent of the quarries at the first directors meeting held in Boston that hot summer's day.

Others in the corporation, some Boston businessmen, were John L. Thaxter, Salem T. Lamb, William F. Dow, Benjamin P. Battles, R. T. P. Fiske, and John Lothrop.

One of their first necessary projects was to widen their quarry roads from Flat Ledge to the wharf. Within their first two years, they also completed an extension of their granite pier so they could load more schooners and sloops.

Company by company, Rockport Granite bought out the smaller firms that had been supplying them with stone. They bought the Cape Ann Granite Company in Bay View in 1893 for \$90,700; the Canney quarry at Pigeon Cove, for \$51,000; the James J. Vernon quarry at Lanesville for \$27,500; the Lanesville Granite Company land for \$8,000, in 1909; the Hali-but Point quarry, known as Babson Farm quarry, for \$40,000 and the final triumph, the Pigeon Hill Granite Company in 1914, for \$100,000.

The granite kingdom had grown from some thirty acres surrounding Flat Ledge in Rockport to two hundred there; plus one hundred ten acres at Pigeon Cove; forty-two at Lanesville and two hundred forty-five at Bay View. They also owned seventeen acres of quarry land at Jonesport, Maine, where they got out Moose-a-bec pink granite. And they eventually employed eight hundred men.

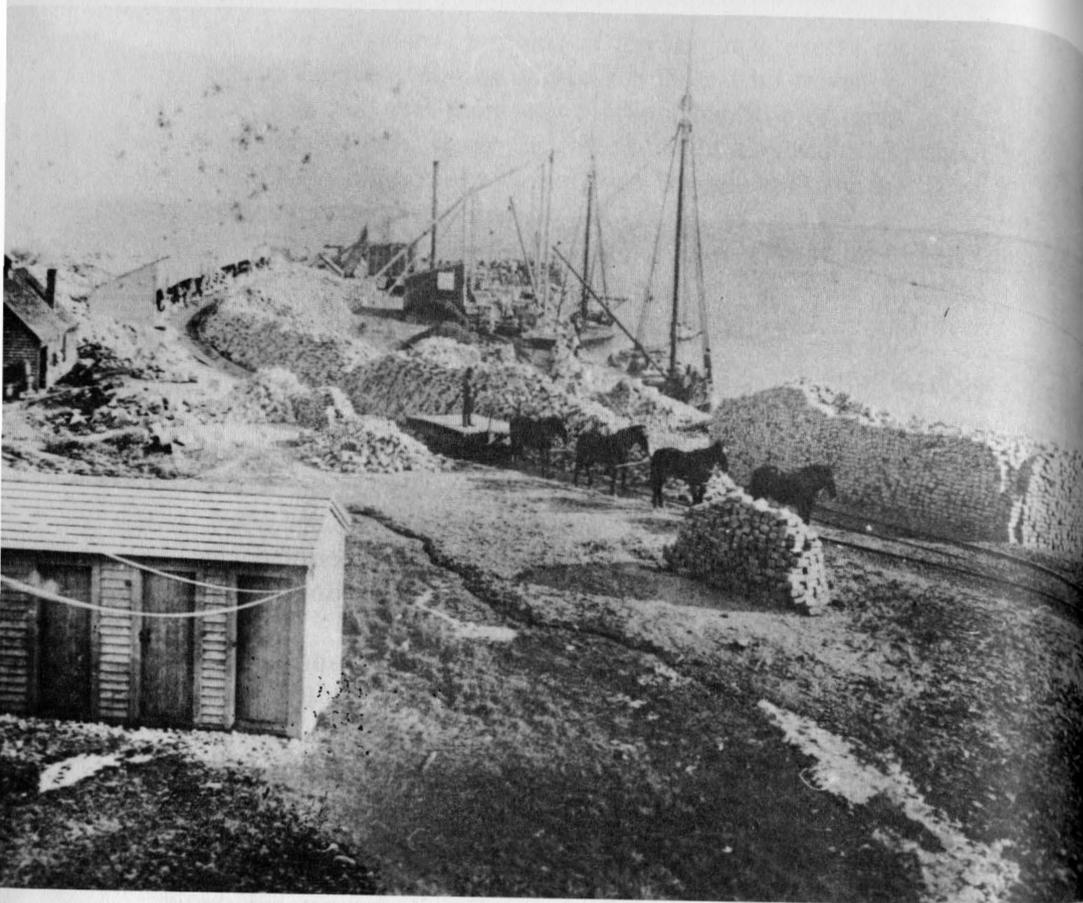


Photo courtesy Robert Rapp
Four horses in single file pull empty platform car up from Granite Pier, Rockport. Paving blocks are stacked everywhere in this scene, about 1910.



Photo courtesy Sandy Bay Historical Society
Great Arch, Rockport, in the process of being built by the Rockport Granite Co. in 1872. It is still part of Granite Street.

They competed successfully with other New England companies in supplying major cities with paving blocks from their quarries. In 1875 their paving blocks alone, not counting thousands of tons of dimension stone, totaled 1,198,610 tons, the bulk of their business then. But they went on to tackle bigger contracts—their officers always believed in looking ahead past the paving-block market, which the automobile was destroying. They furnished stone for the Boston Customs House tower, erected from the center of the original customs house in 1915. The Registry of Deeds building in Salem was built entirely of Rockport gray granite in 1909, and the polished sea-green granite for the two fountains outside Union Station in Washington, D.C. came from their Blood Ledge quarry at Bay View, the same quarry opened up so successfully by the old Cape Ann Granite Company.

In its closing years the Rockport Company prepared all the stone for the Mellon National Bank in Pittsburgh, and sent stone down for the Woolworth Building in New York City. Their pedestal and statue for the Providence War Memorial in Providence was used as an example of meticulous work and was photographed in detail as it progressed from the block of stone on the wharf to the finished statue in the city square. The project was later described in a little booklet "Granite Cutting, An Analysis of the Granite Cutter's Trade" published in June 1929 by the Federal Board for Vocational Education in Washington, D.C.

The Rockport Granite Company supplied the stone for work at the Holland Tunnel in New York and its exit in New Jersey, and in 1897 when the Boston subway system was opened, the Company received compliments for its fine polished green granite entrances and exits. The Park Street station, when completed, was particularly noted.

The Company was expanding so that every minute lost in getting stone to the wharf counted against them profitwise. In 1868 they began tunneling through solid rock, an unheard-of attempt in the Cape Ann area, to connect their two quarries with a new straight run to the wharf. They had previously gone uphill "like cold molasses" and then rumbled down a tortuous roadway to the wharf.

They intended to build an arched bridge to support the roadway above, for it was part of Granite Street, the main road between Pigeon Cove and Rockport. Later, they planned a

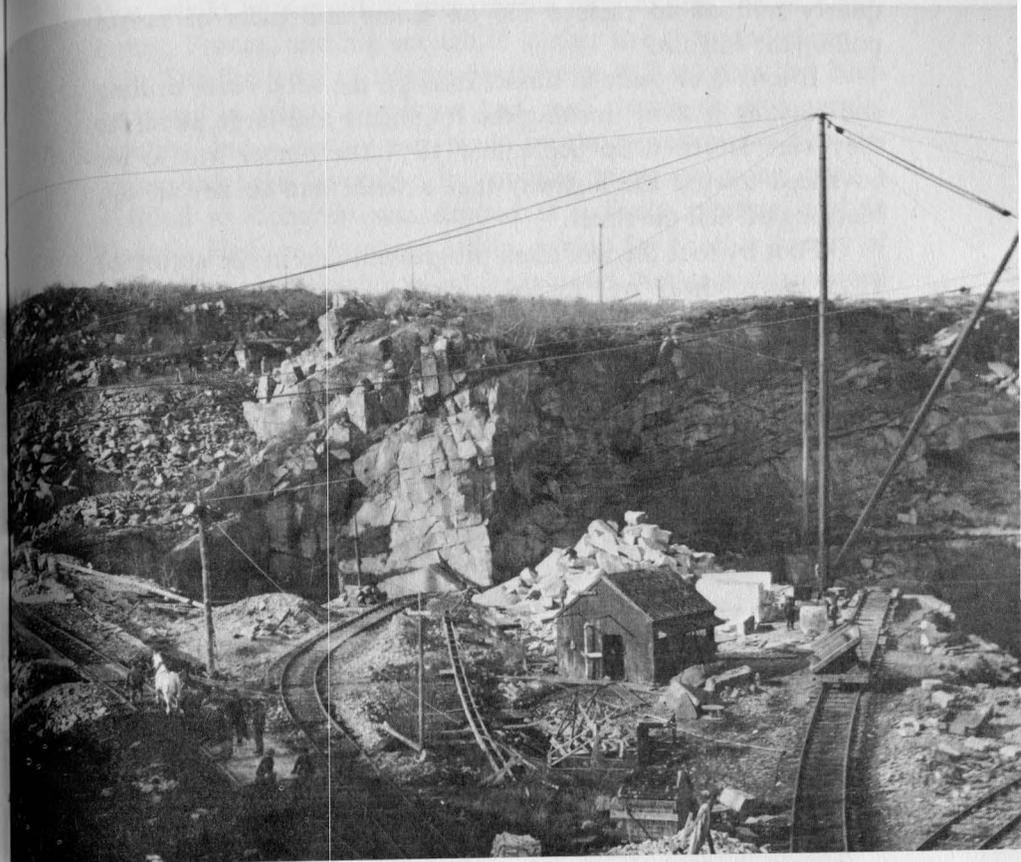


Photo from the Foster Collection
View from the bridge shows Flat Ledge quarry, Rockport, the first large quarry in operation on Cape Ann.

quarry railroad to replace the ox teams and pairs of horses pulling the wagons.

It took four years to tunnel through the solid rock, drilling and blasting it away, moving the fragments and large pieces as they were loosened. In September 1871 the tunnel was so far advanced toward the highway that a fence had to be put up, blocking off half the street.

Foot by foot the workmen progressed, and in the spring of 1872 the roadway was turned more to the west side, for the old roadbed was to be cut away.

By July the workmen were blasting out the face of each wall twenty feet below the surface to make a niche for the abutment of the arch. The work was being done under the supervision of Jonathan Pratt of Quincy, said to be an expert on stone arches and bridge building. He told the men the bridge was one of the largest in the state.

The first part of August the men began to erect the arched bridge over the sixty-five-foot span, bank to bank. By September the huge trusses were in position to hold the arch, and the courses of heavy blocks for the arch were creeping up each end as they were set. They would be joined in the center with the final block, the keystone, on each side of the arch. The eastern side was inscribed with the date 1872.

On Saturday, September 29, 1872, the keystones were set in and the bridge became a solid arch capable of supporting itself for all time, although it still had its timbers in place. It was the fastest construction anyone had ever witnessed, for the bridge alone had taken only eleven weeks to complete.

The building of the bridge was not without a death by accident. In the spring of 1871, the huge shears used for hoisting rocks and clearing the channel to the tunnel came down with a mighty crash. One of the giant timbers fell on a workman named Peter Rogers, and he was so badly injured that he died that same evening.

It was a typical cold and raw day off Rockport on November 12, 1885, when quarry whistles and boat horns blew in unison as the first stone was dropped in the sea one and three-quarter miles offshore to begin building the Sandy Bay Breakwater. In completing this more than a mile-long breakwater, it was hoped to form the Sandy Bay National Harbor of Refuge,

that would be second in prominence only to the one in Cherbourg, France, and big enough to shelter five thousand ships.

The first plan of a large breakwater at Rockport had been proposed in 1829. A petition had been drawn up at a special meeting and a survey was made by the government. The decision had been favorable, but nothing more was done, until a petition to Congress was drafted at a lively meeting held in Haskins Hall on March 29, 1882, asking for another survey of Sandy Bay with a harbor of refuge in mind. Action was approved in October and the surveyors from the corps of engineers arrived to make their studies from all the hills overlooking the harbor. In 1883 the engineers recommended to the Secretary of War that a breakwater be built. They estimated a cost of four million dollars.

The breakwater was to be a V-shaped area enclosing at least sixteen hundred acres. It was to extend a mile northwest by west toward Andrews Point, the most easterly part of Cape Ann, leaving a passage two thousand feet wide for vessels. Then the breakwater was to run southerly to Avery's Rock for 3,540 feet with a fifteen hundred foot entrance. The two entrances were wider than any other on the entire coast. When completed, the harbor would have the form of an irregularly shaped diamond.

There was a lot of excitement in town when the first contract was made with the Rockport and Pigeon Hill Granite companies for 128,000 tons of stone at 58-3/10 cents per ton. The stone was to be composed of the jagged pieces usually discarded as grout during routine quarry work. It was to be used as rubblestone for the substructure.

The sloop *Screamer* from the Pigeon Hill Company, Capt. Albert Pittee of Rockport in command, dumped that first load of stone, using the derrick on the sloop's mast. All the committee members who could get away from their desks and jump aboard were there, including the elderly Amos Rowe who had helped the breakwater project in 1829. Everyone cheered as the first stone sank with a mighty splash right in line with the marker buoy. Then they covered their ears as their own sloop as well as the steamer nearby sounded their whistles to celebrate the event.

Both companies took the second contract to supply 114,931 tons of stone at one hundred thousand dollars, begun in the

spring and completed on June 23, 1887. The third contract, from January 2, 1889, to January 28, 1890, was for 110,000 tons, but for the same amount of money appropriated by Congress.

Granite was drawn to the wharf by horses or oxen where it was loaded aboard the vessels, usually in the afternoon. Sometimes they loaded scows, clumsy vessels with two holds, decked only around the sides and ends. Their loads were dumped by using levers to open the bottom doors when over the proper spot usually marked with buoys. Then the tug towed them back again.

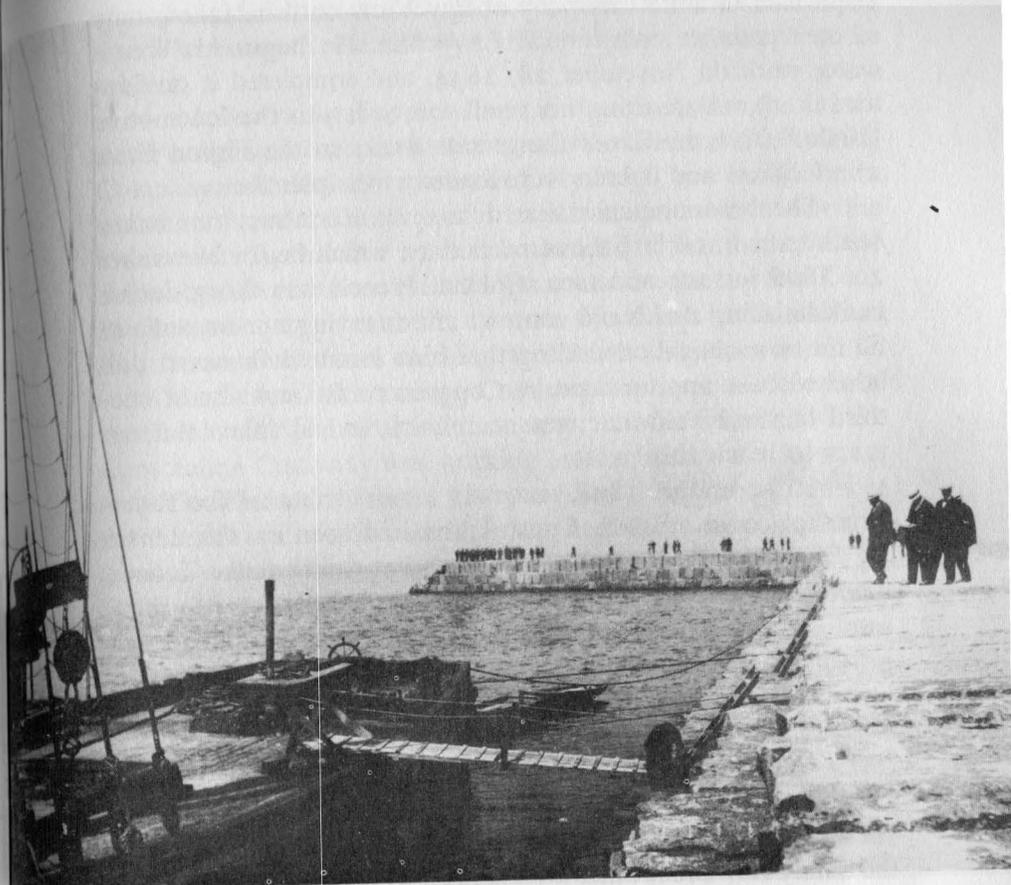
Vessels usually started out to the breakwater early in the morning so they would complete the unloading by noontime. At the site, an engineer in his own boat carefully checked the amount of stone unloaded from each vessel. In the summertime, many West Point cadets acted as checkers of the weights.

At first the breakwater was to be a narrow-based structure about forty feet wide, but plans were changed in 1892 after two thousand feet of the substructure was built. The average then became at least two hundred feet wide. This formed a hill of stone fifty-five feet in depth below the water, sloping gradually to its base. It was more stubborn against the ocean's onslaught, for the force of the waves and water running gradually up the sides was greatly diminished before it reached the exposed superstructure.

The fourth contract was for a hundred and fifty thousand dollars and 185,000 tons were dumped between June 1, 1891 and August 31, 1892. During the fifth contract, which began October 14, 1892 and was completed in August 1894, some 126,827 tons of stone were dumped for the same price. At least 13,000 tons of this was the first part of the superstructure.

On April 25, 1893, the first stone appeared above water and a few days later, four men stood on it for the first time. They were Capt. Timothy Davis, Anthony Williams, George Warren Grover, and Capt. C. S. Orr.

It came as a shock to the two leading granite companies to find that they were outbid on the sixth contract offered at a hundred and fifty thousand dollars. The New England Granite Company of Pigeon Cove and Lanesville, just formed by Colonel Jonas H. French, was awarded the contract at 59-7/10 cents per ton. The price previously had risen to 89 cents per ton. This was the same Colonel French who once operated the



Visiting the arm of Sandy Bay Breakwater about 1898. It never was finished, but exists as a threat to navigation.

Cape Ann Granite Company at Bay View until he failed, only to open another company at Lanesville. He began his breakwater work on November 28, 1894, and completed it on September 29, 1897, using his small railroad with the locomotive "Nella," from the Lanesville granite works to the Pigeon Cove wharf. Scows and lighters were loaded at the pier there.

The three companies shared the seventh contract for another one hundred and fifty thousand dollars, which began November 10, 1896 for 200,000 tons. Colonel French was doing double work finishing up his old contract and hurrying up the stone to fill his new obligations. Altogether nine hundred thousand dollars had been appropriated by Congress so far and almost one-third of the breakwater was completed. It had taken thirteen years to reach this point.

At the end of 1898, some six hundred feet of the superstructure could be seen. Construction had been on the shorter leg from Avery's Rock about 3,540 feet underwater. Toward Andrews Point, the substructure ran at an angle for one thousand eight hundred feet. The total substructure in 1898 was 5,340 feet, with two thousand feet of it still on a smaller base.

The committee figured at this rate it would take forty years to build the breakwater unless they could maintain the present speed. If so, it might take only ten years. The breakwater at Cherbourg had taken seventy-five years to build and had cost twelve million dollars. The figure was at five million dollars for the Sandy Bay Breakwater completion. At least there was plenty of stone to be had and it was handy.

Every year or two, in order to spark more interest in Congress, the Rockport Breakwater Committee invited every dignitary it could think of to have lunch at Turk's Head Inn and then visit the breakwater to see how badly it needed finishing.

Such a visit took place on August 13, 1904 when a large committee and guests were taken out in the tug *H. S. Nichols* and the lighter *William H. Moody* from the Rockport Granite Company wharf. They had a good chance to observe the action of the water, for the low tide had kicked up a swell and they could compare the ocean on one side and the quieted waters on the sheltered side of the breakwater. An engineer was on hand to answer questions, and a stenographer took down all questions and answers for study later.

That year as the summer ended, \$1,350,000 had been

appropriated and used, and 1,800,000 tons of stone sunk at the site. The estimate was still five million dollars to complete the project.

A new company, very small in size, came into the breakwater building scene just before 1906. The Federal Contracting Company, with its large quarry at Folly Point, had built its own wharf and small railroad just to handle stone contracts for the breakwater. In October 1906 they dumped 1,100 tons of stone on the breakwater from their barges towed by the tug *Sea King*. By December they had built up their wharf still more and had four locomotive cranes working there with sixty men in all.

The Federal Contracting Company was later succeeded by the Breakwater Construction Company; and the Coast and Lake Contracting Company was working on the breakwater in 1914.

The Rockport Granite Company had done three-fourths of the breakwater work and had supplied the heavy blocks of granite called "headers" from their Babson Farm quarry at Folly Cove. These 25-ton blocks were fastened at the breakwater with two-inch iron pins. The big blocks were completed for two hundred feet on the elbow to Andrews Point and seven hundred fifteen feet on the southern arm.

But by 1914 the local committee was discouraged because no more money was appropriated, although up to 1911 almost two million dollars had been granted by Congress. The estimated cost had also risen to over six million, with stone at about a dollar a ton.

It seems that the last stones set down on the breakwater were dumped on August 23, 1915. The total tonnage for all the years came to 2,086,480 tons, but the job was still only one-third complete, for six thousand one hundred feet beneath the mean low watermark, continuing under the visible superstructure, which was nine hundred and twenty-two feet long, was the jagged reef of rocks called "Shark's Teeth." This reef had been only partially capped with large squared-off stones, and it was not visible at high tide. During the storms of the early part of the twentieth century, many of the 25-ton capstones had been pushed out of position by the force of the entire Atlantic behind them.

The people of Cape Ann were stirred up in January 1916 when despite heated discussions up and down the coast, from Philadelphia to Portland, Maine, an adverse breakwater report came from the corps of engineers at Boston commanded by

Colonel W. E. Craighill. He seemed to think the breakwater project should be abandoned and that with lights and buoys to mark it, it should be easy enough for all vessels to avoid it.

A committee was formed to fight this decision. They invited all the mariners and tugboat captains up and down the coast to come to a meeting in Boston. Some of the boosters even made up a program of pictures and posters and took it down to Philadelphia in August 1916 to a meeting of the Atlantic Deeper Ways Committee. They insisted it was a national project and should be regarded as such.

But the corps of engineers from Boston stuck to their decision. In Rockport people had to live with the fact that instead of a safe harbor for vessels sailing up and down the coast, the uncompleted breakwater was actually a terrible menace to every boat that neared it. The entire length of those pointed rocks in the reef was noted on all nautical charts, but people were just not that cautious; even with lights and buoys, accidents happened. Many a boat barely skipped over the Shark's Teeth at half tide or less, little realizing the narrow escape it had had. It was that reef that tore off the propellers of the new torpedo boat destroyer the *USS Warrington* in 1916. She had to be towed to the Charlestown Navy Yard in Boston to mend a hole in her hull as well.

Hopes were rising in 1936 when another committee armed with an estimate of \$61,000 to repair the Sandy Bay Breakwater, presented it to Congress. But it went nowhere, and was turned down once more in December 1938. Again in the 1940s the "two million dollar rock pile" was in the news as people tried once again to interest the congressional committee on rivers and harbors. They stressed the great value the harbor would have as a stopping place for the entire Atlantic fleet of the US Navy, as well as the hundreds of yachts that passed in a day.

Almost as though to emphasize the threat posed by the unfinished breakwater, the 7,198-ton Liberty ship *Charles S. Haight* was wrecked on the breakwater during a blinding south-east snowstorm on April 2, 1946. Her engine block can still be seen resting on top of rocks in front of the breakwater.

Even as recently as 1972, the Town Selectmen tried to interest the corps of engineers in repairing or at least maintaining what is left of the breakwater, but it came to no avail. The Sandy Bay National Harbor of Refuge remains a dream. There

is now only the dangerous jagged mile-long reef offshore at Rockport to show how hard the local people tried to make it come true.

The Rockport Granite Company suffered from labor troubles often during its existence, but one of the best-remembered strikes was the one on March 6, 1899, dominated by Finnish quarrymen. The strike was regarded as a test of strength for the Finns, the newest immigrant group to work in the quarries. They were viewed as an unknown quantity and time would show whether or not they also had staying power.

Before the strike was over in June, the Finns proved the meaning of one of their own words, "sisu," meaning endurance. And they won for themselves and their fellow workers a nine-hour day, with time and a half for overtime.

During the strike, the Rockport Granite Company tried to use one hundred fifty immigrant Italian laborers from Boston in their quarries, bringing them in at night and housing them in temporary shanties built near Blood Ledge quarry at Bay View. This was about a half mile up the track from the main office.

Each time the Finns heard about the scab labor force they tried to explain to the terrified Italians that workers were on strike there, for they suspected that no one had told the immigrants the true facts of the situation.

On April 20, 1899, a Thursday, muttering imprecations in their own language and shouting to each other, a mob of two hundred Finns poured through the paths leading up to the quarry from the village. One group hiked up the track direct from the main road at Bay View, and another met them, coming from the hills above "Dublin" in Lanesville. All had picked up rocks and clubs.

Meanwhile the Italians had rushed out of their flimsy shanties and taken refuge in the old boilerhouse, carefully closing all the big shutters and putting out all lights.

The Finns called out to the Italians, and had a fellow speak for them—a man who had been in this country from Italy for a few years. But no one appeared.

Craving action, one big Finn climbed up and tore at the heavy shutters with his bare hands, almost yanking the old wood from its iron bolts before being stopped by a patrolman with a billy club. Then a shower of stones and sticks rained down on the roof and sides of the boilerhouse. Finally a shot rang out.

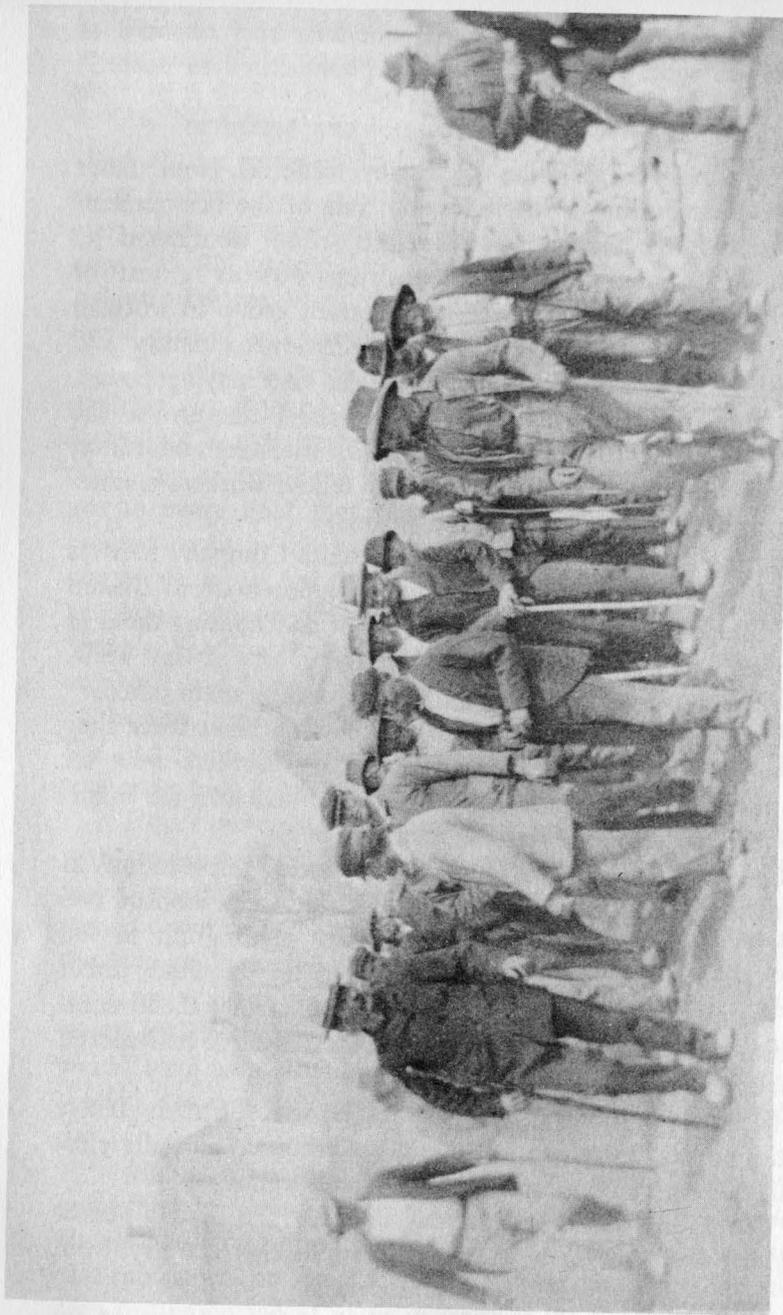


Photo from Rogers Collection
Rare action shot of strikers on the Rockport Granite Co. wharf, taken by Louis A. Rogers, company executive, in 1899.

No one knew who fired the gun, but it was discovered that big Ruell Griffin of Lanesville, who had come along to see the excitement, had had his shoe laces shot off. His foot was also slightly cut, his friends discovered, as they lit a match in the gathering dark. Griffin said he thought he was fired at because he resembled the quarry superintendent, Mr. James Vernon.

The extra police by this time had arrived from the main office where they had been stationed, and they remained cool, reminding the strikers that nothing could be done until the big meeting was held at the hall. More could be accomplished there, they insisted.

The mob finally broke up and straggled back down the hills toward home, leaving the Italians untouched. But they in turn were so frightened, they had crept out of the back of the boilerhouse in the dark and hidden in the woods. One small group spent hours in an abandoned hencoop not far away.

Despite the pleading by the padrone in charge of the Italian work group, at least thirty of them the next morning were packed up and waiting for the first streetcar to come down the hill. They were headed for the 6:30 train to Boston and safety.

Before the end of April the men at the Pigeon Hill Granite Company had gone out on strike, too. Actually a lot of the men were working at new jobs after having turned in their hammers at the office, indicating they weren't coming back. They were over in Lanesville working for William Cheves, or Colonel French, or for Barker Bros. who had been on a nine-hour day for a few years. Some had found work as far away as Wisconsin, and moved there.

Things came to a boil at Rockport on Monday, May 8, 1899, when two hundred Finns, wielding clubs, marched to the Rockport Granite Company wharf where they heard that a stone sloop was being loaded with paving by workers who were not on strike, being the engineers and blacksmiths. Company officials were helping them, it was said.

Every striker had a stick about a yard long, and those who could, carried stones. They were a formidable mob and the company men, together with the small group of police on guard, immediately sent out a distress call to Rockport and Gloucester.

Approaching the wharf, the Finns shouted and ran forward to try to turn away the horses and wagons, six of them,

that were ready to load the vessel at the pier. The horses became startled and began to plunge and neigh, so that turmoil ensued. In seconds everyone was brandishing cudgels and throwing stones at the teamsters. In vain, the company men tried to block the onslaught. One officer shouted that an agreement would be reached that day perhaps, to start work in October at nine hours. But the angry men were not deterred by this proposal.

The men pushed on, scattering paving blocks, and shoving the teamsters off their wagons. One team came within inches of careening off the wharf, but was yanked away just in time. A group of the leaders of the Finn mob pushed up to C. Harry Rogers, the company general manager, and demanded that he do something to get the company to agree to the nine-hour day demand.

Rogers tried to remain cool as the mob forced him back closer and closer to the edge of the wharf. As he felt the big edge timbers behind his heels he pulled a revolver from his pocket and pointed it at the biggest Finn in the lead. Immediately, they stopped shoving and pulled back, growling to themselves. Finally, after a lot of persuasion from the police, who gathered around Rogers, the mob moved off. Many turned and shook their fists at Rogers, miraculously safe and dry on the wharf's edge.

The horses by this time had quieted down, but not until several women watching from the hill had fainted and were being revived. In a manner equally as cool as that displayed by the general manager, his brother Louis Rogers, treasurer of the company, used his new camera to get what he hoped were action shots of the strikers. He planned to use the pictures for future identification and possible arrests.

The newspaper of the day said his pictures were not successful, although he did get enough to identify at least sixty strikers. His shots of strikers on the wharf and the men with the teams turned out to be blurry. Nevertheless, he turned down an offer to sell some of them to a Boston newspaper, believing them to be of great value to his company.

"Wouldn't take a thousand dollars for one of them," he said.

On June 5, 1899, the smokestacks were going at the Pigeon Hill Granite Company and their whistle blew at 5 A.M. to call the workers back. The strike had been settled. The Rock-

port Granite Company said that, effective June 19, they would grant the nine-hour day with time and a half for overtime.

It wasn't such a long strike as the one in 1879 when the workers were out for twelve months. That was when they struck for a ten-hour day. But the strike of 1899 is most remembered for threats and near violence.

One of the most unusual projects the Rockport Granite Company worked on at their Bay View cutting shed was that of the two sea-green fountain bowls and bases for the Union Station Plaza in Washington, D.C. in the spring and summer of 1909. Each basin measured thirteen feet across when completed, and was cut from a 65-ton block of granite quarried from Blood Ledge. The block was set up on a revolving platform in a three-sided shelter close to Washington Street crossing at Bay View. But the actual polishing of the bowls was a new process, devised just for them, and their methods were somewhat in reverse of the way they did at the polishing shed across the street.

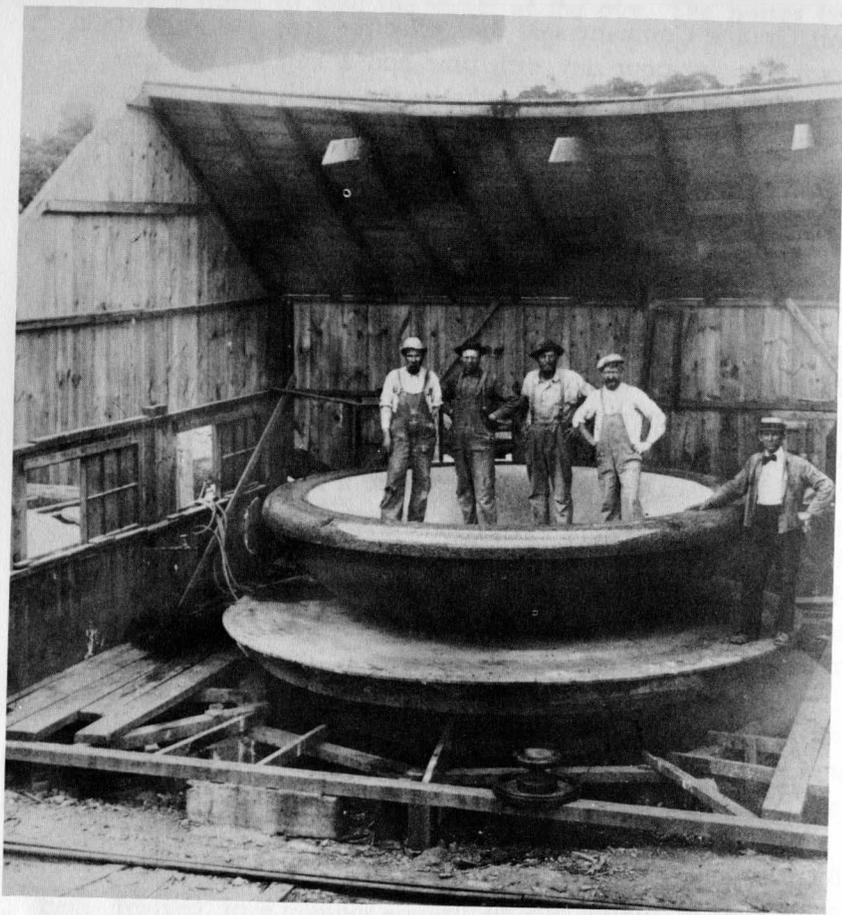
In order to get the rough-hewn stone down to a smoother surface, they at first worked on it with a 4-point surfacer hammer that pounded off much of the roughness and the bunches prior to hand hammering and delicate shaping.

All through the process they had to be careful of the rim, for polishing that curve and lip was a touchy business. It would be so easy to "harm" the stone.

The men worked with hand hammers shaping with skillful blows as they worked, then resorted to what is known as a six-cut bushing hammer, a hammer that consisted of six sharp "knives" bolted together so that they struck simultaneously.

The men brought the granite surface to a dull hone finish by using iron shot, then putty powder and felt buffers, pouring on the water carefully from old condensed milk cans. But the trick they used with the fountain was that they had the big stone revolve below the buffer for polishing instead of having the buffer dance its way over the stationary stone as was the usual process for polishing. For the first time, electrical power was used to do this.

The men worked night and day in shifts on the fountain bowls. It was such a novelty to see lights burning at night down at the cutting yard that people rode down from town by evening streetcars just to investigate the strange sight.



Granite carvers take turns posing in fountain bowl made at Bay View shed by the Rockport Granite Co., for the Washington, D.C., Union Station Plaza, about 1910.

By the first week of July when the first fountain bowl was completed, five men could stand in it together in a row, and the surface was so highly polished, one old-timer said he could have used it for a shaving mirror.

There was a lot of discussion about how the bowl was to be shipped to Washington, but it was finally decided that a flatcar frame with cross pieces located in a Vermont marble quarry was just what they needed at Bay View. That would support the bowl perfectly on its trip down and it could be brought down over the rails to Washington.

C. Harry Rogers, in charge of the shipping, then began to worry about something happening to the bowl on the way down to Washington. Even though the bowl was heavily insured, the thought nagged at him. Finally, he turned to his engineer, Bucky Moore from the Babson Farm quarry, and ordered, "Bucky, you go down with it."

A southbound freight pulled out of Boston for Washington several days later and the flatcar carrying the bowl was attached to the tail end just behind the cabooses. And Bucky rode in that bowl all the way to Union Station.

There were checkpoints along the way where Bucky was to call Rogers and tell him of the progress, but the waiting was too much for Rogers, who hopped a fast train and was at Washington to meet the somewhat lamed and sleepless Bucky when he arrived, bowl and all.

August Olson of Pigeon Cove worked on the twin bowls, as did Bill "Red" Stuart, Billy Jewell, George Gray, David Linehan, Peter Vicari, Joseph Vicari, William Crowell, Rudolph Macchi, Tony Macchi, and Josiah Ginns. Amos Glover and George Taylor supervised the job.

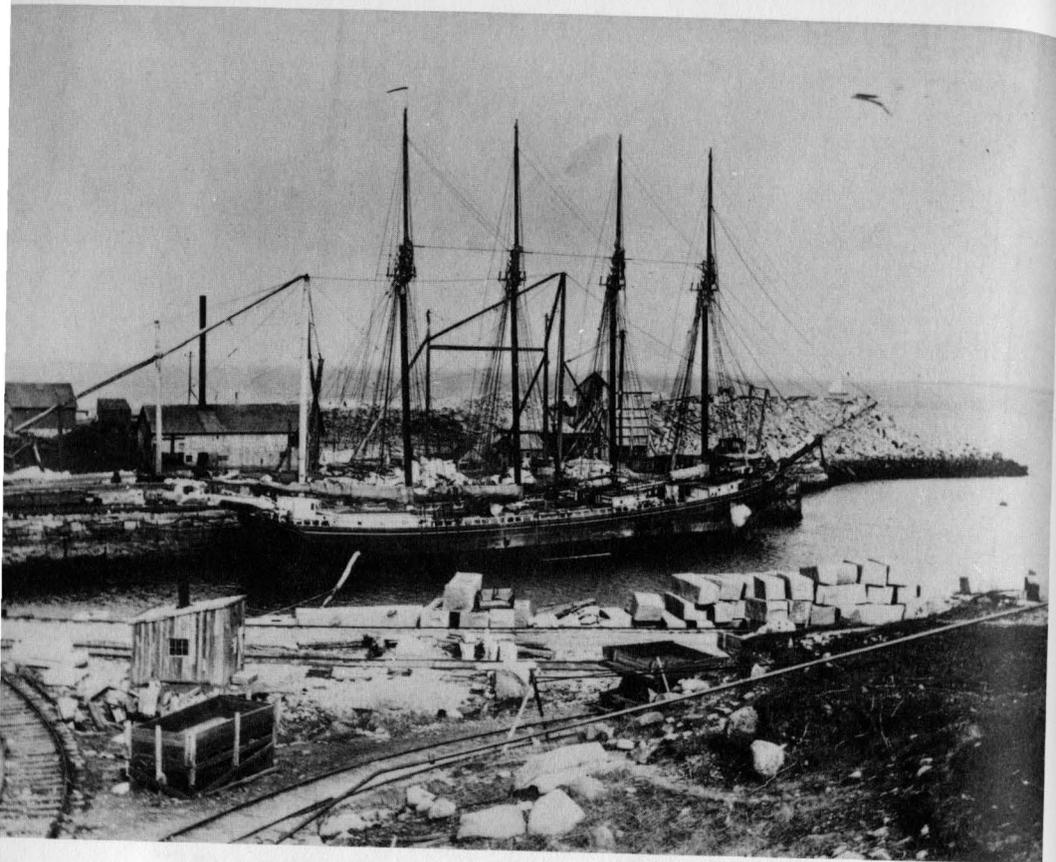


Photo from the Rogers Collection
Four-mast schooner *Rachel W. Stevens* loads granite at the Rockport Granite Co. wharf, now called Granite Pier, Rockport. Typical wharf scene, 1909.

XI

Bay View pier was stacked high with blocks of granite for the new lighthouse at Graves Ledge in Boston's outer harbor early in 1903. The Rockport Granite Company was working on that contract and shipped stones throughout 1904 until the job was completed with the lamp-lighting in 1905.

The first stones were landed on the ledge from the steam lighter *Ben Harrison*, and setting began on August 11, 1903. The site had been blasted out at the ledge, and a landing stage, timber bulkhead, and platform had been built up.

The lowest course of stone, thirty feet in diameter, was laid just four feet above the low tidemark, so a schooner stood by, ready to take the men off the ledge immediately in case of any emergency.

By October 31, when work was suspended because of the cold weather, the men had set twenty-one courses of blocks, and the lighthouse was forty-two feet high.

In the late spring when warm weather came, work was taken up again. The pier at Bay View was again piled neatly with stone blocks marked to go into their planned places at the lighthouse site. By July 1, 1904, forty-four courses were complete, rising to a height of eighty-eight feet above Graves Ledge. But still, the lighthouse could not be finished that year.

All the iron work had been done in Boston, and the lens had come from Paris. Final projects were the building of a granite oil house south of the tower with a footbridge connecting it to the light. To protect the wharf, 2,000 tons of granite riprap were set in.

On the evening of September 1, 1905, the lighthouse keeper climbed the circular ladder and turned on the new light which then was the most powerful beam in Massachusetts history, 380,000 candlepower. It was a double white flash appear-

ing every six seconds. The foghorn sounded two three-second blasts every twenty seconds.

The Rockport Granite Company lived through a veritable nightmare in 1909 when their just completed Essex County Probate Court and Registry of Deeds building in Salem, Massachusetts suddenly developed a rash. Not only did the characteristic soft gray Cape Ann granite break out into spots, but the surface seemed to be virtually peeling.

No one had ever seen such a thing. Horrified granite company officials sent telegrams all over the country to scientists, alerted their best chemists, and just about wore paths in the old green rug on the office floor as they paced in consternation.

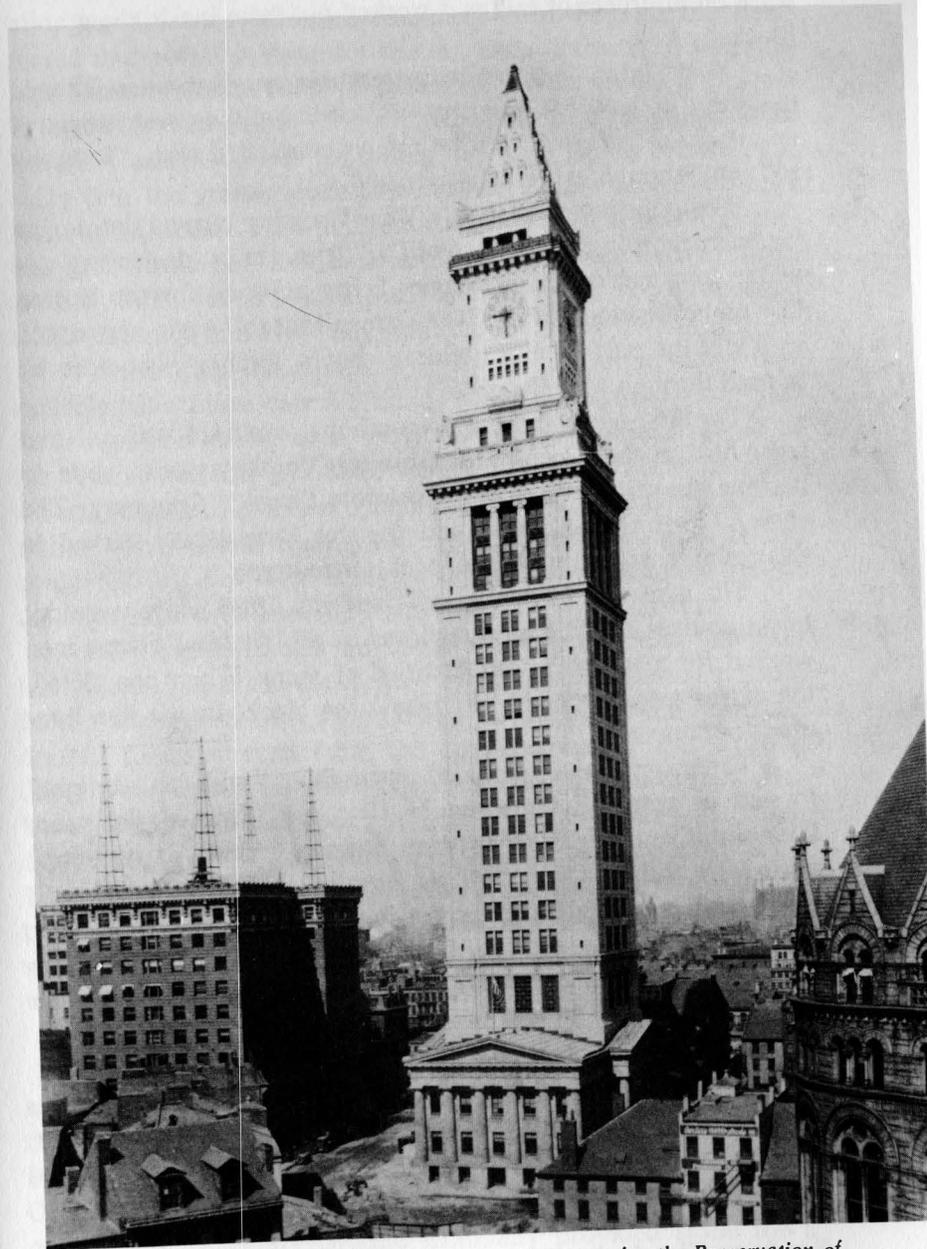
Someone thought iron was working out through the granite; others thought the stone surface needed a good washing with oxalic acid, a general but powerful granite cleaner. Pessimists in the company walked about with their beards sunk deep in their pinch-up coat collars, convinced already that the granite industry was doomed.

Fortunately, a chemist tracked down the real culprit. As is the custom in quarrying and then cutting stone, a special type of drill hole called a Lewis hole is put down into each finished block of granite so it can be lifted by the derrick hook without injuring the hammered surface of the stone. Throughout the building construction at Salem, the Lewis holes were used to expedite hoisting.

Down on Cape Ann where the stones were piled on the wharf waiting for spring, a freezing rain had iced up all the granite and filled the Lewis holes. When the men tried to insert the derrick dog hooks they couldn't use the Lewis holes because of the ice. So they hit on the idea of thawing out the holes with salt. It worked very well, and they loaded the entire shipment for Salem in this manner.

It was Professor William H. Walker of Boston who made the tests and discovered what was wrong. He found thirteen per cent salt in the dust from the ordinary granite face, and thirty-four per cent in the dust from the dark colored "rash."

Just to make sure that it was the salt the workmen had used, Professor Walker made tests in his Boston laboratory with sea water, Turk Islands salt, rock salt, and common table salt. "Just wait," was his final advice to the upset granite company officials. He also told them he was sure that rain water would



*Photo courtesy Society for the Preservation of
New England Antiquities*

Boston Customs House tower, completed in 1915, of Rockport and Pigeon Cove gray granite. Building at the base was constructed in 1837 and is of Quincy dark gray granite.

wash off all traces of salt as it worked out from inside the granite blocks.

Years later, the company treasurer laughed when he told the story of how the Registry of Deeds building went through an attack of "measles," but he always concluded with, "It wasn't so funny, though, when it happened."

The polishing mill at Bay View Crossing burned flat during the early morning hours on April 2, 1914, almost destroying one of the four carved granite eagles being polished for the Boston Customhouse clock tower. The sixteen-foot tall eagle was stored in a distant part of the building, but a lumber pile close by burned through.

The first eagle for the customhouse contract was cut and assembled at the Pigeon Hill Granite Company works, soon to become the property of the Rockport Granite Company. The eagle was of Greek design and was the largest ever carved in this country, according to the local stonecutters.

The stones to form the eagle with its lifted wings were cut in six courses totaling eleven pieces in all. At least fifteen men worked for a month to cut just one of them. When completed, the eagles were set high, just below the clock, in the five hundred-foot tower.

The original saucer-domed customhouse with its "skylight" framed in granite was begun in 1837 and finished ten years later, built entirely of deep gray Quincy granite. It was supported by thirty-two monolithic granite columns, twenty-nine feet high. They weighed 42 tons each.

It was in 1911 that the big dome was removed and work begun to provide an anchorage for the tower, which was to rise from the center of the old building. Pilings were sunk down as far as one hundred feet to support the weight of the tower. It was completed in 1915 and called Boston's first skyscraper.

During the contract's run, the Rockport Granite Company took special care to blend the gray color as best they could to match the Quincy gray, a somewhat darker shade. To do this they had to use a mixture of granite from their Steel Derrick Pit, from Flat Ledge and from Old Pit in Bay View.

The granite company at one time was so proud of their work with the tower and the eagles that they used a drawing of the eagle as a trademark and inscribed on it the words, "King of Rocks."

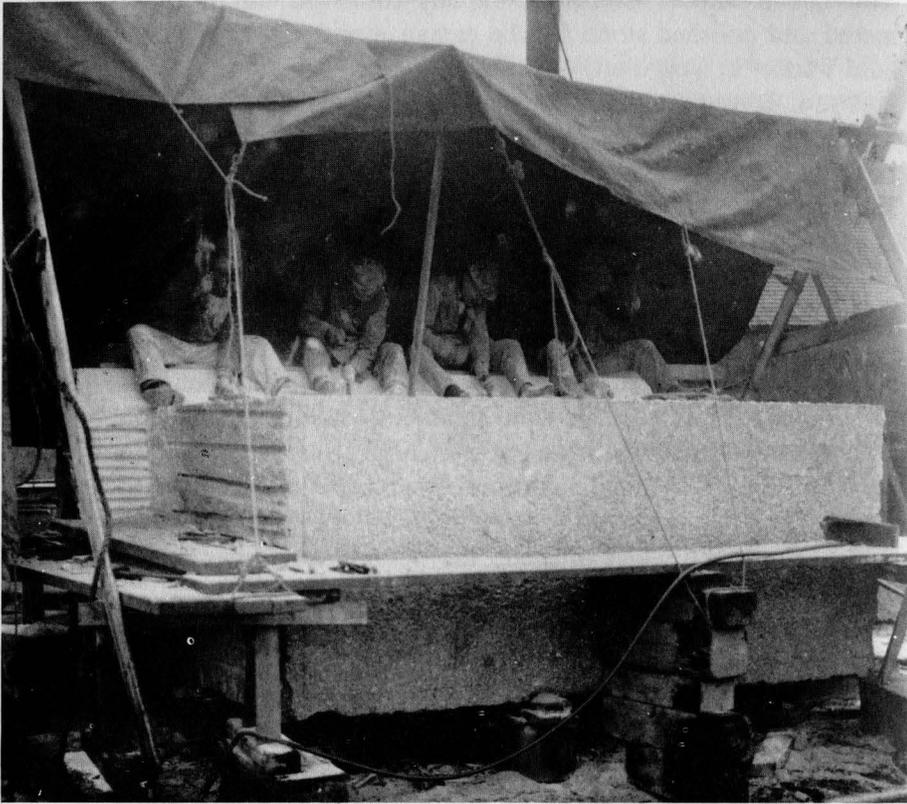
The Rockport Granite Company furnished all the hammered and polished stone for the entrance and exit of the Holland Tunnel in New York—a milestone project that was finished in 1929. It was begun in 1920 when ventilation shafts were installed, and it opened for traffic in 1927. But it wasn't until 1929 that the granite company finished setting in their blocks and curved pieces. They had sent down their own men to supervise the work. For this contract, too, the men had to work double shifts, for it was a three hundred and sixty thousand dollar contract, and every day counted.

At this time the company really found out how the new surfacing machines saved time. It was figured that each surfer replaced twelve men with hand bush hammers. Some of the veteran surfer operators were George Robertson, William Stuart, Charles Williams, Dominic Toneatti and James L. Bohan. They knew every kink in their machines, and always could tell just how fast to move the pounding hammer to get the straightest and smoothest surface in the shortest time.

All the granite trim on the exit and entrance of the Holland Tunnel is a ten-cut hammered job—a relatively smooth finish. There are also balustrades. Each had been carefully drafted to be worked from the rough stone by the drafting department upstairs in the office on Washington Street, Bay View. Under the watchful eyes of William Taylor, the other draftsmen, Joe Higgins, Toivo Nikola, Harold Clark, and Mr. Tillson worked at the antique thirty by twenty-six-foot drafting table. This table had been designed by David Dennison, who was a draftsman for the Cape Ann Granite Company in 1885 when the department was built.

A lot of granite work was done at Plymouth, Massachusetts, in connection with the history of the Pilgrims. Not only is the canopy over the Plymouth Rock of Rockport gray granite, but so is the big block of stone on the hill that says "1620." Over at Pilgrim Hall, built in 1834 of rough-hewn Weymouth granite, the Rockport Granite Company provided stone for a new granite portico with six columns, completing it in 1922.

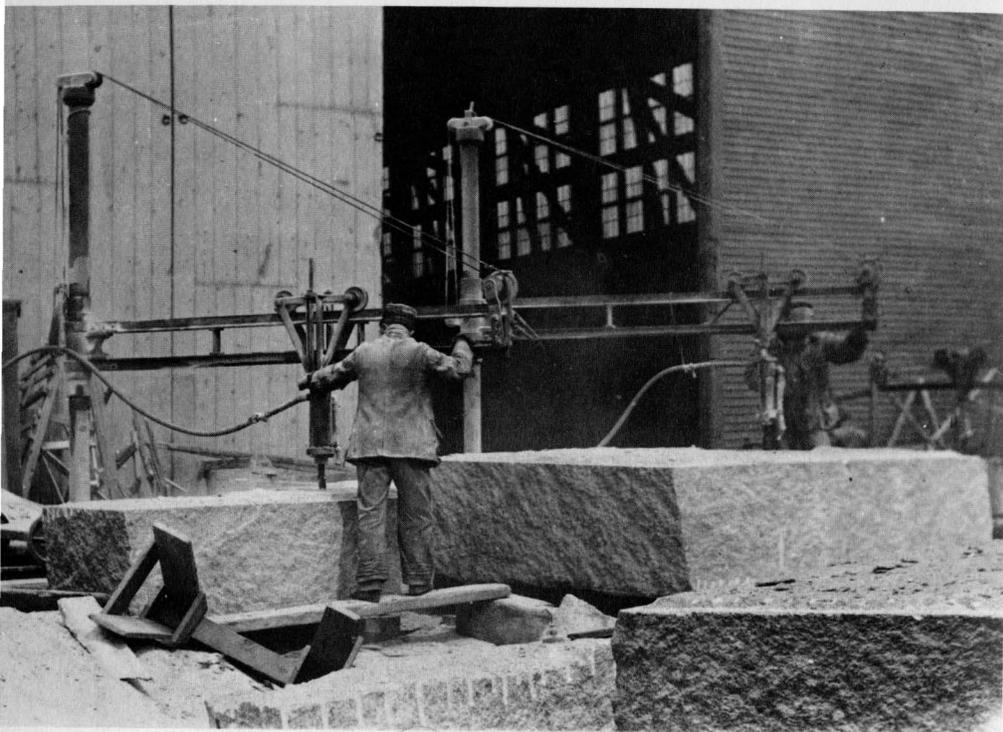
Many times contracts were taken where the company used their "pink" granite from Maine. Such a case was the Evans Memorial Galleries of the Boston Museum of Fine Arts. All the granite was brought down from Maine by boat and finished in the Rockport cutting shed. Other examples of their "Moose-a-



Four men under a rigged canvas shelter work with hammers to shape the Hispanic Pedestal Base, May 13, 1927, for New York City. This was a Rockport Granite Co. project.



Dominic Toneatti operates a surfacing machine on a cold day at Bay View cutting shed, about 1920, for the Rockport Granite Co.



Two surfacing machines run by air chatter away as the men work near the door of the Bay View cutting shed at the Rockport Granite Co. plant about 1910.

bec" granite were the Gloucester Safe Deposit and Trust Co. building in Gloucester, Massachusetts, and the Federal Reserve Bank, in Cleveland, Ohio.

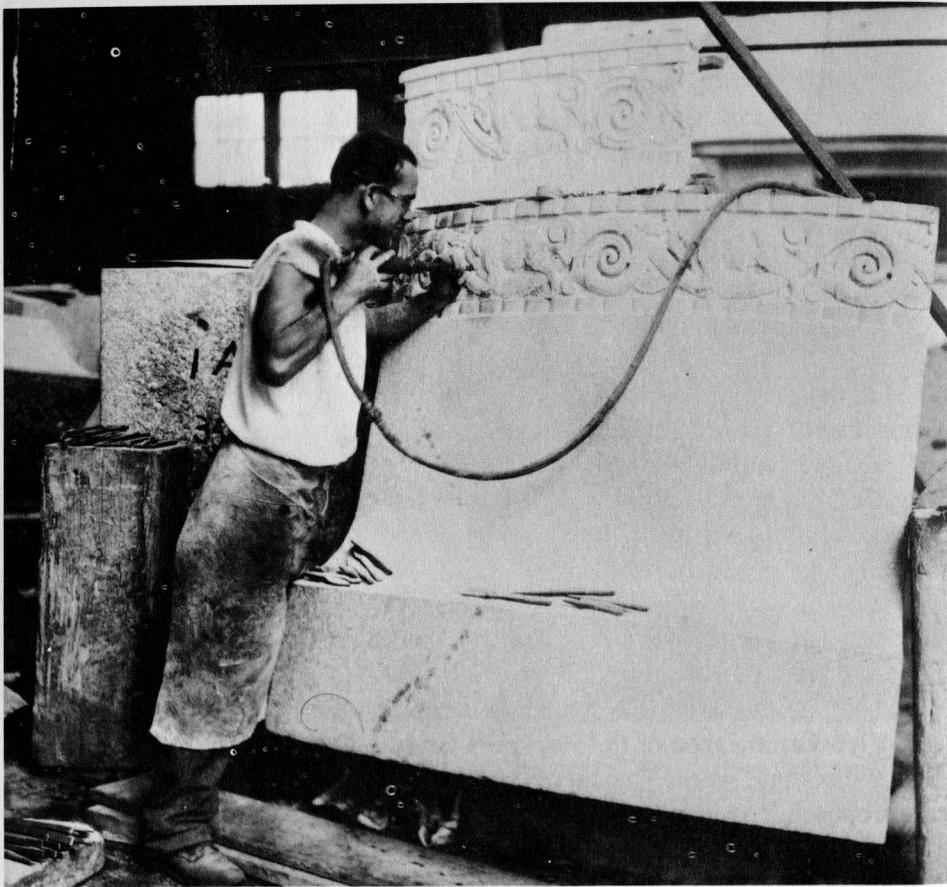
Gray granite from Rockport and Bay View was used in the Mellon National Bank Building, Pittsburgh, Pennsylvania, regarded as one of their main contracts by the local company. There was also the gray granite for the Scott County Savings Bank, Davenport, Iowa, where they supplied polished stone for the base; and the Federal Reserve Bank at New Orleans with a story-high base of polished Rockport gray.

The Winters National Bank of Dayton, built in the 1920s, as were the other banks, was designed of sea-green granite from Blood Ledge quarry. And sea-green columns stood against the gray granite base of the Seaboard National Bank of New York City. Six sea-green columns were built into the new Hartford Times building, Hartford, Connecticut. The columns were the same that for years had formed the portico of a church in Madison Square, New York. They were thought to be too perfect to be discarded and as soon as the Hartford building was designed a use was found for them.

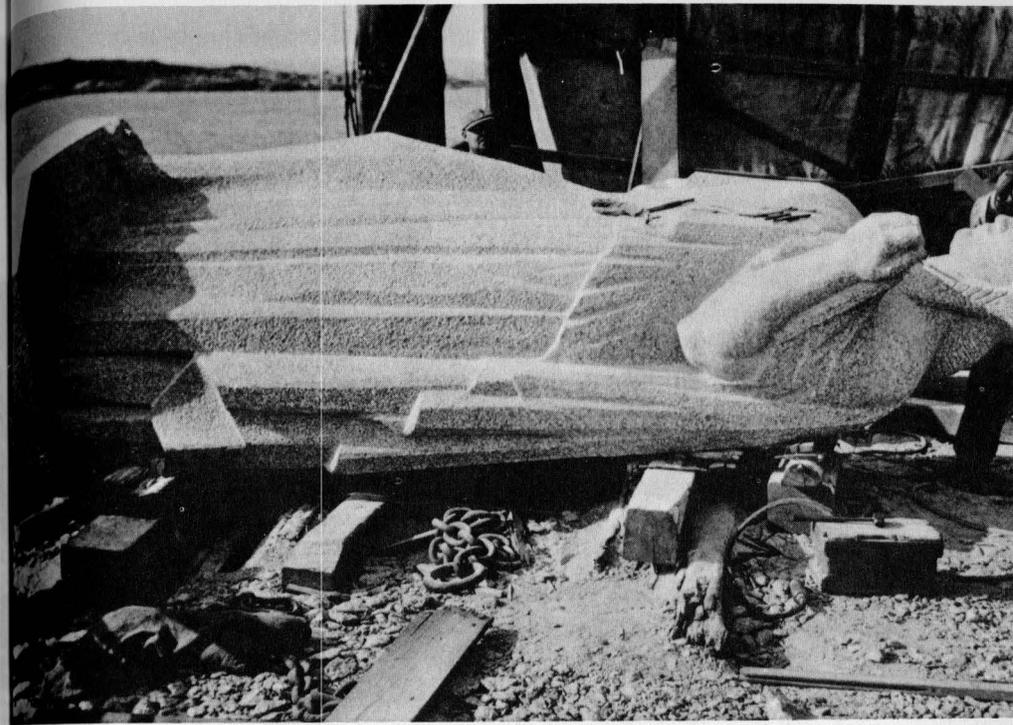
As soon as the weather began to warm in March 1928, the Bay View cutting shed of the Rockport Granite Company began on all the stone work, five hundred and ninety-five pieces, for the proposed Providence War Memorial in Postoffice Square at Providence, Rhode Island. The supporting shaft and figure of a woman at the top was to reach one hundred and seven feet, six inches, and there was to be much decorative carving on the 23-ton base stones. The plans called for Moose-a-pec granite.

Plans were drawn for each stone by the draftsmen at their huge table. They used German linen, dull on one side and shiny on the other. It was thirty-six inches wide and came in a roll about fifty yards long. The men ripped it down like any fine cloth to get the length piece they needed. And the women tried to get all the discarded plans, for they washed out the starch and ink and the result was a fine linen material suitable for the best tucked shirtwaists they could make.

It was the lighter *William L. Moody* with her captain "Scrapper" Knowlton that brought in the granite to the cutting shed wharf. There John Nelson and Charles Wilkin, old hands at running the locomotive crane, picked up the blocks, some as big as 45 tons, and moved them to the proper bunker as designated by a painted number on each stone.



Angelo Buzzzi, granite carver, uses a pneumatic tool as he works on the Providence War Memorial for the Rockport Granite Co. at Bay View.



Statue to top the Providence War Memorial lies on wharf, ready to be boxed and loaded for shipping. This was taken in Bay View, in 1926.

Charles Johnson, then superintendent of the Maine quarry, personally escorted the 65-ton rough block for the statue when it was sent to Bay View. He had to move it from the deck on huge rollers and chains when the tide was just right, for no single derrick on the wharf could lift it.

The ponderous block was set up on sleepers under a canopy for protection from the weather, and there at the pier, the men began to rough out the fifteen-foot statue of a woman. They followed a scale model furnished by the sculptor, C. P. Jennewein. Three leading granite carvers, William Jewell, George Ricker, and Angelo Buzzi, worked on it with their hand hammers until the stone was ready for their fine chiseling.

Besides the six-cut hammering job worked by the surfacing machines, many pieces called for fluting. These one hundred and seven pie-shaped pieces were taken to the polishing shed by flatcar, where a carborundum wheel neatly made the necessary grooves. Then the flute nosings were shaped by hand also in the polishing shed.

When the monument sections were complete and it was time to begin shipping, all the stones were washed off with a weak solution of oxalic acid to clean them well. Then the edges were wrapped in heavy brown paper for protection against rubbing. Finally, each form was encased in wood. John La-France worked on this project, for he had superintended that important lumber shipment early in the spring.

When it came time to load the finished statue on the lighter, it was neatly boxed and padded. It still weighed a formidable 38 tons, though. The locomotive crane hooked onto one end of it with Tim Cleary at the controls of the wharf derrick, on the other. Together, using one signalman, the operators lifted in unison until the statue was a scant six inches from the ground. Then they swung it gently onto the deck of the *Moody*, once again riding at high tide, tightly lashed to the bumpers at the pier. Of course Superintendent Johnson went aboard with the statue, and stayed with it until it was smoothly unloaded at Providence.

The Providence Granite Company has come to adopt this monument on its letterhead and advertising literature, probably because it now owns the quarry in Maine from where the pink granite originally was taken.

There was a lot of discussion in 1893 concerning the merits of using sap-faced granite for building. Sap-faced granite is an orange brown color, the same gray granite, but stained from iron oxides seeping through the stone. The Rockport Granite Company had provided sap-stone for the building of many Catholic churches in New England and particularly for the Manchester (Massachusetts) library in 1887.

In old quarrying days, the sap-faced stone was removed from the quarry and discarded in favor of the fresh gray granite beneath.

Just to promote the rusty colored granite, a small building of it was constructed by the granite company to be used as its office on Granite Street near the arched bridge in Rockport where it stands today. In April 1893, Thomas O'Hearn of Pigeon Cove cut the letters spelling out the name of the company.

The desks were ready and a small party was held to celebrate the first day the following month, when the staff moved into the office. They had a slab of stone quarried from Flat Ledge below the bridge polished to serve as a counter top. Low tiles decorated the fireplace in the reception room, and the floor was a mosaic design of imported marble. An innovation was the installation of a speaking tube that connected the office with the company store just over the roadway that went down to the pier. Upstairs was the drafting room.

For more than fifty years, on the small lawn facing the sea at Rockport on the side of the office building, there has been a polished pink granite ball mounted on a hammered granite pedestal. The ball must be at least thirty inches wide. Perhaps the only reason no one has ever tried to move it is because of its great weight.

The company store on the north side of the road to the wharf was packed with items any quarryman was likely to need at home or at work. They had files, barrels of flour, sea boots and skates, fishing lines and hatchets, small hand mirrors, oil-skin jackets and pants, marlinspikes, sounding leads, pick axes, nails and plug tobacco—the kind with a red rooster cut out of tin stuck into each square. They had cheeses of all kinds and cold meats and ham. On hand were codfish, dried and salted; jugs of molasses, and kerosene for lamps.

As small items were picked out, it was the custom for the storekeeper to open an account in the big ledger for each man so he could charge as he wished. When payday came, the cus-

tomer paid the total owed. Items were usually small, such as a half pound of sandwich meat, a box of raisins, or a pair of gloves.

A very popular item was the blue paint used by the company itself. The Rockport Granite Company painted all their own quarry vehicles with it—their teams and jiggers. Then each man bought the low-priced paint and brushed it on all his fences, wheelbarrow, and farm teams.

Before long the color became known as “wagon wheel blue” and “Finn blue,” it was used so much by the small dairy farmers on the Cape and by the Finnish people in particular. They often painted their kitchen woodwork with it, sometimes including their furniture.

Many private families took in boarders who worked at the quarry company. This had been the custom for many years. The Rockport Granite Company had a boardinghouse at Rockport on Granite Street and over at Bay View on the corner of Washington Street and Quarry Street. As was the custom of the large companies, they also owned and rented blocks of tenements in Rockport and at Bay View.

One of the favorite pranks at the boardinghouse was to see that the newest boarder got the corner room. He didn't know it, but when the 5 A.M. whistle blew announcing there would be work that day, he would be the closest to it. That whistle always startled the poor fellow and he leaped up, banging his head on the slanted ceiling over his bed.

For \$3.50 per week each boarder could have his lodging, a washing done, and his noon meal put up daily to take to work at the quarry. This meal was packed into a five-sectioned dinner pail made of tin. It opened at the top with a cup section and under that came the pie plate where the men carried a thick piece of pie or a slab of fruit cake if the cook made spicy treats in the winter.

In the big dinner pail section the men sometimes carried a stew or an English pasty. These were lamb or beef cooked with vegetables until thick, then baked in a thick pastry crust. In the bottom section the men carried tea to drink with their meal. No one seemed to mind that the meal was cold. In the winter, if they really wanted to heat their food, they just set their dinner buckets on the boiler in the enginehouse.

For as long as thirty years after the Rockport Granite Company was dissolved in 1930, the former treasurer kept his ledgers handy in which were recorded every man's name who ever worked for the company and the dates he worked. He did this, because often after a stonemason left or retired, he developed silicosis in his lungs. He needed his work records in order to collect any benefits due him.

Silicosis is caused by inhaling silicate or quartz dust over a long period of time. Much research has been done on the subject so it is not the mystery it was in the 1800s when the stonemasons were being struck down by “stonemason's consumption” as they called it. Later researchers found that the stonemason's disease took from five to twenty years to progress in the lungs.

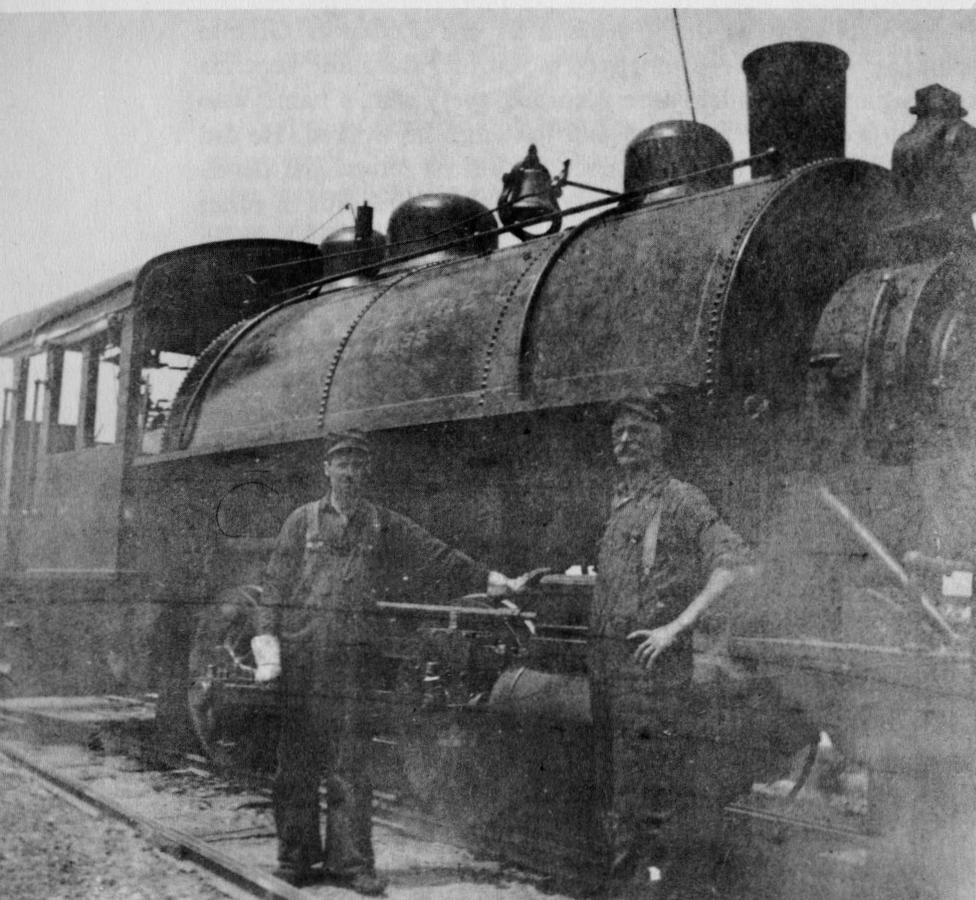
Before it was discovered that prolonged exposure to stone dust was the cause of the disease and resultant lung damage, many of the quarrymen actually thought their illness came from being exposed so much to the sparks that emanated as they struck their drills. One man in Bay View who lived to be ninety-two often said he had avoided stonemason's consumption, perhaps because he changed jobs so often in the granite company. He worked down in the quarry for a while, then came up into the shop or worked on the quarry railroad as a brakeman. He had seen three of his brothers die with the dread disease.

In the early 1900s the Rockport Granite Company had installed air hoses to vacuum up as much stone dust as possible, particularly when the men were running their surfacing machines. The hammers pounded up so much dust and grit that it was funneled via a six-inch hose to a dust trap built in the shape of a small shed near the main road.

Roadbuilding contractors purchased teamloads of the dust and chips residue for their own use, for the company sold everything it could, “except the noise,” as one executive pointed out.

Another practical use for the stone dust was as a garden fertilizer, though this is almost unbelievable today. The old-time stonemasons used to spread the gray stone dust around their fruit trees. They also made trips to the cutting shed dust trap and the nearby heap of stone dust and brought home wheelbarrow loads to put in their gardens.

Some wondered about the actual value of the stone dust as a chemical fertilizer, but thought it was probably due to its



Rockport Granite Co., Rockport, locomotive "Vulcan," 0-40-ST 1912, which ran at Flat Ledge and Upper quarry. James Babson Silva, engineer, on the left.

potassium content. No one could think of much else except that stone dust seemed to work, for the gardens grew much better with it than without it.

Most stonework today is done in dust-free sheds, and much water is used to flush the surface of the stone when it is being worked with any pneumatic tool. There are masks to be worn when carving stone or at other times, and every precaution is taken to see that dust is never breathed into the lungs.

A substantial loss of business in the 1920s leading to an eventual shutdown by the Rockport Granite Company was blamed on the strike of 1922-23. On April 1, 1922, the granite workers in all the plants on the Cape failed to report for work. They were on strike against the proposed American plan or open shop, which the company wanted to initiate at once. The men also wanted the work week reduced from forty-four hours to forty, and they wanted a raise such as was being proposed by workers in New England quarries elsewhere.

The engineers remained at work, but only long enough to bank their fires, and then they, too, left for home. Even James Babson Silva, the engineer of the locomotive "Vulcan" banked his fire and drew up the engine at her accustomed spot below the cliff near the bridge.

One side effect of the strike was that the quarry foremen were forced to turn out to unload a coal barge that had been towed in at Bay View pier. Usually, all the men were summoned by the whistle at the quarry to perform this chore.

The workmen held a mass meeting after it was discovered that the quarry bosses had brought in seventy-five men from out of town to work in the quarries on the current Coney Island jetty contract. The newcomers were driven from quarry pit to quarry pit in covered trucks, for even schoolchildren stoned the trucks as they passed. The company evidently felt they could have untrained men temporarily filling in for the strikers—anything to get the stone out to fill the contract.

To protect the newcomers, about a hundred men were sworn in as police, given guns and clubs, and then assigned watches over the quarries to maintain order in case the strikers showed up to cause trouble.

On April 26, 1922 more than two hundred quarry workers marched from Lanesville to Rockport for a mass meeting. Over five hundred men jammed into Rockport Town Hall to

hear speakers explain the strike situation and why the workers felt that the plan was most "unAmerican."

Despite heavy snowstorms, many meetings were held, but still no agreement could be reached. The strike went on and on, longer than anyone had ever dreamed, until it was finally settled in a compromise agreement at a meeting on February 1, 1923, that lasted from 7 P.M. until 5:30 A.M. the next day. It was held in City Hall in Gloucester. After cheering was over, it was decided to frame the pen used in the signing of the agreement.

The Rockport Granite Company officials always said that much ground had been lost in the business world by this eleven-month strike. Business seemed to go downhill from that point on, although some choice bank construction contracts were awarded to them. Another intruding force was the growing use of concrete in construction.

On April 1, 1927, it was announced to a surprised Cape Ann community that the Rockport Granite Company would suspend operations for ten days until their next stockholders meeting, when future policies would be determined.

It seems that over a long period of time, capital stock had been bought up by someone who had not been identified. That person or company had gained control of the company by obtaining 1,526 of the three thousand outstanding shares. It was said that M. Turner Brockway of New York, a clerk, and C. P. Northrop, a New York attorney, were representing the new interests.

At the time of the discovery of the change of control, from six hundred to eight hundred men were employed in all the quarries belonging to the company. Their payroll amounted to six to ten thousand dollars a week, a great amount for that day.

When the ten-day period was up, the company announced that there had been no new developments in the situation and the identity of the new owners had not been revealed. The decision was to continue as before with the same directors and officers, and re-open the plant at once.

But by January 1930 it was decided that the Rockport Granite Company would finish its contracts and then close down. On June 13, 1930, the granite works were liquidated. The identity of the new owners was never revealed, but they had suffered in the 1929 crash.

Hundreds of men were left without jobs to face the Great Depression that was then starting. As for the Rockport Granite Company land and quarries, eventually it was bought by a local land speculator and then sold, parcel by parcel, to private individuals. The City of Gloucester sold some of it to recover tax losses.

So the great granite industry, which reached its peak with the Rockport Granite Company, died that summer. Except for a few small efforts, it has never been revived on Cape Ann.



Photo Henry Bollman
Karl Persson splits granite curbing in 1956 at Johnson's quarry, Pigeon Cove.

XII

The only quarry on Cape Ann from which granite is being taken at the present time is the Johnson quarry at the end of Pigeon Hill Street in Pigeon Cove.

In 1956 it was leased by the Providence Granite Company and is now owned by them as a source of 20-ton saw blocks for their cutting shed at Providence, Rhode Island.

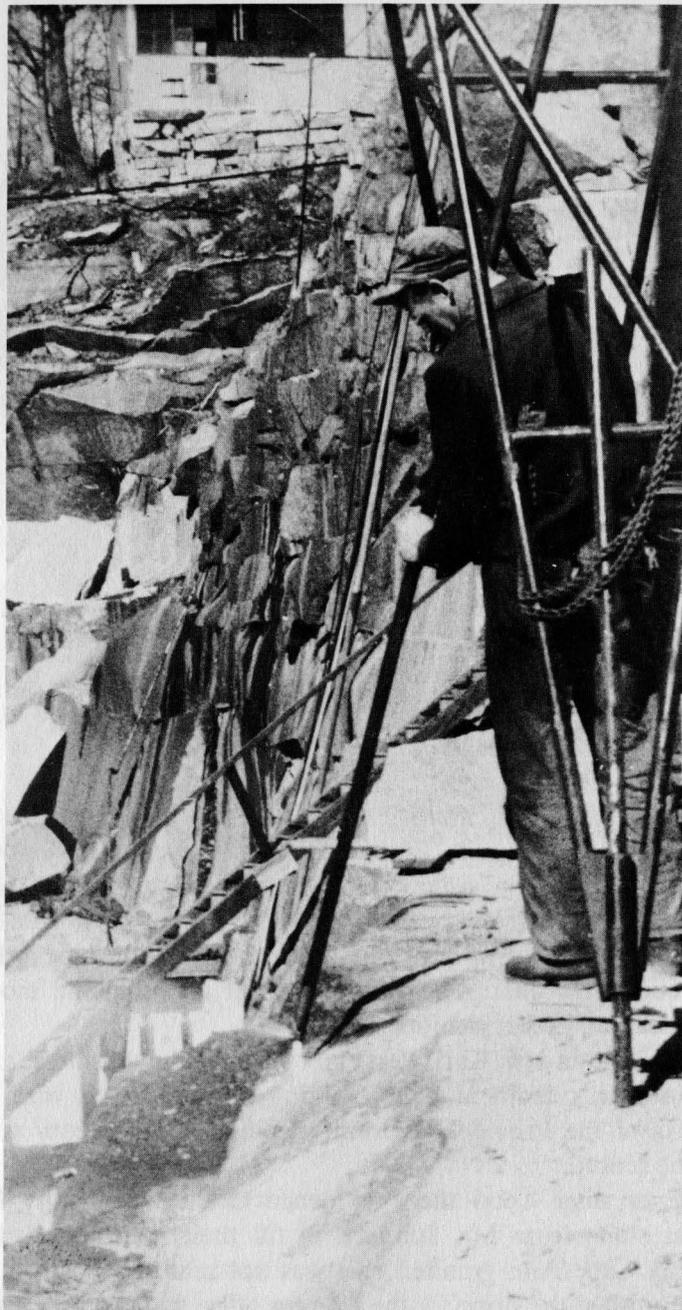
The quarry was originally opened as a paving-block motion by J. Leonard Johnson, a Swede, in 1898. Six friends helped him set up a hand derrick, and a man named Swan Larson went into business with him. But later Larson decided to go to the gold fields of Alaska and Johnson continued on by himself.

Before long he enlarged the quarry to sixty-four acres of land. He sold paving blocks and dimension stone of all sizes to the Rockport Granite Company, and after their demise in 1930, the Rockport Paving Block Corporation was formed. Johnson once estimated that at least one and a half million blocks had been cut in his quarry, and that was not counting the monument stock and other random stone.

His son-in-law Karl Persson operated the business after Mr. Johnson's death in 1936, sharing the quarry pit with the derricks of the Providence Granite Company for twenty years until he retired.

Ever since 1900 the Providence Granite Company had bought stone from Mr. Johnson to fill their contracts calling for gray Cape Ann granite. This was not realized locally until they furnished the stone for the US post office and customs house on Dale Avenue, in Gloucester, a project that was completed in 1934.

When it came time to ship the rough stone for the columns for the front of the building, they wondered how to get the



Erkkila photo

Providence Granite Co. beyond Pigeon Hill Street, Pigeon Cove, began their jet channeling operation for the first time on May 2, 1957, with John Grasset holding the burner.

stone over the Blynman Bridge at Gloucester which had a 15-ton limit. The stones for the columns weighed 34 tons each. So they constructed a sixteen-wheeled low truck—almost a jigger, and set one of the columns on it. They figured that by the time the second half of the load would be passing over the little bridge, the first half would have gone across it, neither half really exceeding the load limit.

Early in 1956 the Providence Granite Company announced their intention of beginning to quarry for themselves at the Johnson Pit, and they immediately began to pump out some fifty million gallons of water, using four pumps that ran day and night. All the water ran down a big brook into Ipswich Bay.

In October they replaced two derricks at the pit, setting them in steel bases instead of the old wooden type. The derricks could be turned completely around, whereas the old ones used to have to backtrack for a half turn first.

The granite office and storehouse building that Mr. Johnson had built was used to house the Diesel compressors, pumps, and other machinery. The whole area was cleared up, and as the water receded each day, gangs of blue-overalled men swept junk and old iron into cradles to be lifted by the derrick and dumped onto a truck.

According to Eugene Bernardo, who was then in charge of the company, much of the granite taken from the pit would be used decoratively in construction, perhaps as a one- or two-inch veneer. He explained that where steel was used in construction, granite was not needed as a strength factor.

On May 2, 1957, the company introduced to Cape Ann a new method of cutting granite from the quarry ledges called jet channeling. The torch, as it was called, was a giant acetylene type burner about six feet long. It looked like a crowbar from someone's pasture, but inside it, three separate rods fed air, water, and Diesel fuel simultaneously to the brass tip. It was regulated from a refrigerator size cabinet set up on the nearby ledge.

Up over the side of the pit, past the steel trolley arrangement that steadied the torch, snaked the three hoses to their individual supply of air, water, or fuel. The tanks of oxygen were kept in a fenced-in area near the base of No. 1 derrick.

The bright-hot flame at the tip of the channeling rod burned with a deafening roar like a plane imprisoned in the quarry. As the rod was moved slowly and rhythmically up and down the

ledge, the flame popped the particles of granite so that they became gray sludge. A four-inch wide rift was made and cut down to twelve feet where the natural lift occurs in this quarry. The big chunk of ledge was then swiftly cut into sawblocks by hand or pneumatic drills.

The men cut as much as sixty square feet of granite in a day using the torch. Before long the bottom ledges were covered with 15- and 20-ton blocks waiting to be lifted out.

All the quarrymen gathered around to see the old trailer being loaded twice a week. Usually, the block weighed so much that only one could be carried away at a time. Everyone wondered as the big block was set down on the trailer by the derrick boom whether the vehicle would collapse. It shuddered from end to end as the stone's full weight was released to it. Newer trucks taking out blocks today are much more sturdily reinforced.

During their first year of operation, the Providence Granite Company worked the quarry down about fifty feet, getting out sawblocks. So many blocks were shipped out and were seen on the highway headed south that people humorously suggested that someone must be building a pyramid somewhere.

During 1960 the company provided the granite for the construction of two H-shaped dormitories at Bancroft Hall, the US Naval Academy, at Annapolis. Although they had a year to furnish the stone, they managed to fulfill their contract in eleven months, a feat just about unheard of in the construction world.

Specifications called for a six-cut bush hammered finish, a medium smooth one, although some rock-face finish was used as well. To make sure they would have a good supply of stone, the company worked their men all through the winter, clearing the ledges when snow fell, drilling and channeling as usual.

That same year they shipped stone out of Rockport via rail for the new Channel River Bridge in Washington, D.C.

In October 1967 a 30-ton slab of granite almost twelve feet square, was hauled out of the quarry. It weighed sixty thousand pounds and had been drilled out pneumatically. It was then split off with hand drills and wedges instead of being jet channeled. The piece was cut from about thirty feet below the rim of the quarry where the steel derrick mast still rises.

It was a ticklish operation to get the block out of the quarry without losing the derrick over the side. Quarrymen always hold their breath until the stone is set with a gentle thud



Erkkila photo
Hoisting granite from pit at Providence Granite Co. workings in 1958, with Merrill Knowlton of Maine in the foreground.



Fifteen-ton block is being moved slowly into position to be set into trailer for the Providence Granite Co., in Rhode Island. John Grasset with arm upraised guides the operation.

on the banking above their heads and the dog hooks jangle free.

The granite slab was shaped and polished to become a part of the Leif Ericsson Memorial Fountain in Fairmount Park, Philadelphia.

Besides the jet channeling going on in their Pigeon Cove quarry, the company began using a new stippled effect called a thermal finish at their plant in Providence. After the granite blocks had passed through the saws, the smaller ones were then given the new finish, using a small hand torch that popped off granite particles on the surface of the stone as the operator guided it.

The company found that the new thermal finish, still in use, replaces perfectly the old and slow hand method of bush hammering.

An innovation about 1968 was the installation of an orange painted "guillotine," the Hydra-split machine set up in the cutting shed at the plant in Providence. This was designed particularly for hard granite such as that coming from Cape Ann. As soon as the row of Carboloy teeth, with a pressure of 600 tons to the inch, grips the sawed surface of the granite block exactly as he wants, the operator presses a button. There's a long second of expectant silence.

Suddenly, the solid slab splits with a boom that rattles the wooden shed and shakes the window glass. Usually when Cape Ann granite is split, the ground seems to move, too, at least the granite cutters say so.

This simple operation, block after block, saves hundreds of man hours with drills and wedges and is yet another way the granite company keeps itself alive by modernizing.

The company has stockpiled 9-ton and 20-ton blocks at the Pigeon Cove quarry, but has not actually quarried stone for at least three years. Since their watchman and dog have been discontinued, their machinery and equipment have been vandalized so badly that they can operate only one derrick when the trailer is sent in for the weekly sawblock trip. They are also unable to keep pumps running and the water is creeping once more up over the ledges—higher and higher—taking over again as it did in the 1940s.

But the company is very busy with contracts calling for Cape Ann granite. They just finished working on the stone for the Embassy of Japan building in Washington, D.C., and they

furnished base courses for the Pan-Am building in New York City and City Hall in Lockport, New York. Polished granite was also sent out for the facade of the City National Bank, Wichita Falls, Texas.

No one knows what will become of the quarry pit, but some decision will no doubt have to be made when the saw-blocks have been used up.

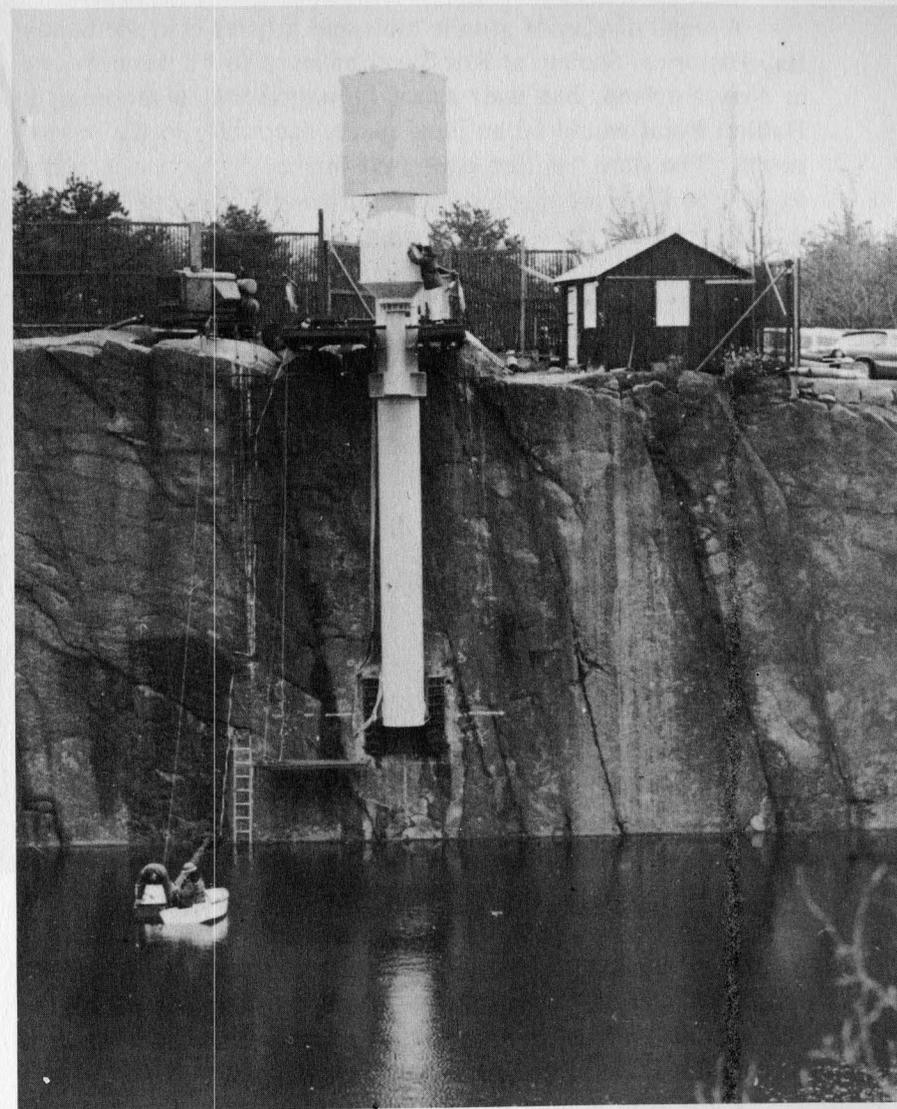
The State of Massachusetts is very much interested in another quarry, the former Babson Farm quarry at Halibut Point, Rockport. They would like to purchase it with the hope of making it a public reservation. Actually, the owner, Dr. Richard C. Webster of Brookline, Massachusetts, would like to give the four-acre quarry to the Town of Rockport for their supervision, provided the state would agree to purchase the fifty-two acres of land. Part of the more than two-year delay is believed to be the rumored half a million purchase price wanted for the land.

So far the state authorities have not committed themselves, although there is some hope that when the state institutes a proposed Coastal Zone Management Program coordinating the use of all coastal land, the move might then be made.

In 1958 Dr. Webster announced the opening of the Halibut Point quarry and lands, calling the area Pitcairn Park. He advertised that it was a "new area for outdoor fun" and that it was "for you, your family—and friends" and that it was "recreation for the discriminating." He had picnic sites with facilities and cooking units, and non-alcoholic beverages were available. But he presented everything so that the natural look of his park was not spoiled.

Besides clearing the land and cutting down the tall grass, he had arranged samples of granite work to show what that industry had once produced. The admission fee also included a chance to fish for rainbow and brook trout, for the owner had stocked the pit. He also mentioned in his brochure the possibility of surf fishing in a half-mile strip of coast, a few steps from the water-filled quarry.

For about ten years, Dr. Webster tried to operate his park, but the idea of picnicking in such an unspoiled area didn't seem to catch on. He then advertised all of his land for sale. That is when the Town of Rockport became interested. In addition to obtaining the quarry for public use, the town also hoped eventually to have a museum of the granite industry there.



Erkkila photo
Allied Research Associates conducted submarine radsome tests in 1958-59 at Nelson's Pit, Bay View.

A small display of granite tools and articles is in the Sandy Bay Historical Society at Rockport, believed to be the only one in New England, but their space is limited and a museum at Halibut Point would be an ideal place, according to the townspeople. The state has also expressed interest in such a museum as part of their proposed reservation, should it come about.

In the fall of 1959, continuing into the winter of the next year, the Allied Research Associates, Inc., of Boston conducted scientific tests at Nelson's Pit in Bay View and at Flat Ledge in Rockport. A powerful boom was erected on the highest vertical ledge and from there a fiberglass radome was dropped with force into the deep water. Skindivers recorded underwater action with cameras, and up on the ledge, a small building housed scientists with sensitive equipment recording the water impact tests.

For a number of years, also, General Instruments Company, Inc., of Boston has conducted smaller scientific experiments at the Bianchini quarry in Lanesville where they maintain a small floating laboratory.

Rockport, which has an internationally known art colony, has many artists who year after year preserve on canvas the ever-changing beauty of the silent, water-filled quarries as they are today. Some of these same artists, now white haired, recall in their youth how they first began painting the quarries—a new subject for them at the time. Actually it was in 1870 that the first artists in Rockport used quarrying as a subject for painting, revealing for the first time the beauty of the sharp ledges as the men worked their way down into the granite depths.

It is doubtful whether there will ever be a great granite industry again on Cape Ann, but plenty of stone is beneath the surface. Those huge quarries could be pumped out again, and the drilling could begin just where it left off.

Cape Ann granite is the hardest granite of all, as the old-timers always insisted it was. As old Charles S. Rogers of the Rockport Granite Company emphatically stated, when the end of the world came, all concrete would be reduced to sludge, but Cape Ann granite would be standing, still in perfect condition.



Vernon's quarry, Lanesville, Bay View, is now a water-filled swimming place in the summer, and pines grow on its ledges. James J. Vernon was the original quarry operator at this pit.

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