

“The Rockport Granite Quarries” (Massachusetts)

In *Scientific American*, Vol. XXXIX, No. 20, pp. 314
November 16, 1878



This article, which begins on the next page,
is presented on the Stone Quarries and Beyond web site.

<http://quarriesandbeyond.org/>

Peggy B. Perazzo
Email: pbperazzo@comcast.net
March 2013

“The Rockport Granite Quarries”

(Massachusetts)

In *Scientific American*, Vol. XXXIX, No. 20, pp. 314
November 16, 1878

“At the extreme point of Cape Ann, on the Massachusetts coast, is the small town of Rockport, where are situated the extensive granite quarries for which the region is noted.

“Forty years ago quarrying for granite was begun here in a small way by Mr. John Stimson, whose success led to the development of one of the most important granite quarries in the country. The quarries are now owned by the Rockport Granite Company, who have shown great enterprise and engineering skill in the prosecution of the work. Roads have been made, bridges built, breakwaters and wharves constructed, houses and stores erected, and employment furnished for from one hundred to over three hundred men, for whose convenience and accommodation neat cottages and well stocked store have been provided by the company.

“The Rockport granite is noted for its superior quality, being very hard, durable, and free from iron or other substances which injure and discolor granite. It is found in huge masses of great solidity, and other a remarkably uniform structure. The finer varieties are susceptible of a good polish, and when carved they retain their color and sharp edges admirably. The pressure required to crush this granite varies from 300 to 1,200 tons per square foot.

“The first granite paving stones used in the United States were furnished by these quarries, for Lafayette, near New Orleans. The first blocks were 7 inches deep, and nearly 12 inches square. Their length was afterwards doubled and their depth increased to 10 inches. Thousands of tons of these paving blocks have been sent to Cuba.

“The Rockport quarries have furnished great quantities of granite for the dock improvements of New York; for the reservoir on Beacon Hill, Boston; for Forts Warren, Winthrop, and Independence, Boston Harbor; the sea wall at Lovell’s Island, and the sea wall at Brewster, Mass. The Henry Clay monument, New Orleans, the Lincoln monument at Cincinnati, and many imposing monuments at Mt. Auburn, Forest Hills, and other cemeteries are of this granite.

“For engineering purposes, mechanical and civil, Rockport granite is in great demand. In this connection reference may be made to the foundation of the large engine at Glenham Mills, Dutchess county, N.Y. In the stones used for this purpose 115 feet of 3 ½ inch holes, made perfectly round, were cut in eighteen days – sufficient evidence that the company possesses facilities for furnishing blocks of the largest size at short notice.

“At the quarries may be seen blocks 25 feet in length, and upward; piles of paving stones, 100,000 and upward in number, ready for shipment; and blocks of all sizes and forms for special purposes. The quarries are well supplied with steam engines, pumps, derricks, and other appliances for keeping the works clear of water, and for lifting the blocks for transportation. The splitting of the granite is easily accomplished. With hand drills and hammers the workmen cut

lines of holes an inch in diameter, from three to six inches deep, and from two to six inches apart, according to the size of the block. Into these holes are inserted half round slips of iron, a pair to each hole. Then steel wedges are driven between the irons so as to exert a uniform and steady pressure, which gradually increases until the great mass yields and splits apart. The blocks are shipped either in the rough or are first taken to dressing sheds, where they are cut to ordered sizes, hammered, and faced.

“A notable enterprise in connection with the quarries is the construction of a breakwater, which enables shipping to approach the quarries at all stages of the tide and in all sorts of weather. Before it was built it was only in fair weather, when the sea was smooth, that vessels could come near. At present the breakwater rises 25 feet above low water, and 500 feet in width on the bottom, 75 feet deep, and 2,000 feet in length; yet this huge work is constantly being extended by the addition of tons upon tons of granite blocks.”