

Santa Cruz County Stone Resources circa 1867-1868

Excerpts from

Mineral Resources of the States and Territories West of the Rocky Mountains

By J. Ross Browne

Report to the Committee on Mines and Mining, House of Representatives
During the Second Session of the Fortieth Congress, 1867-1868

This transcription, which begins on the next page, is presented on the
Stone Quarries and Beyond web site in the California state section.

<http://quarriesandbeyond.org/states/ca/california.html>

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Building Materials in California (circa 1867)

(pp. 247-250)

“Building Materials. – The mountainous nature of the Pacific coast, and the geological formations to which the rocks composing the mountains belong, suggest the existence of a great variety of building materials. Few countries possess greater abundance or variety of these materials than California, and there are few cities in the United States where equal opportunities are afforded for comparing the merits of the materials used in other countries with those obtained at home, than are presented at San Francisco. In the early days of this city everything was imported, from bread to clothing for its inhabitants to lumber, brick and stone for their houses. The city hall is built of Australian freestone, several of the banks and other large edifices are built of China granite, and there are hundreds of steps, pillars, lintels, and other portions of buildings, of sandstone and granite imported from the Atlantic States and Europe. The foundations of many of the old buildings in the city are laid on imported bricks. None of these materials are found to be as durable or as handsome as those since obtained in California. In this, as in other mineral resources, the cost of labor and transportation has impeded development. It is only under favorable conditions that stone for building will pay to ship to San Francisco from the interior of the State; while the cheapness, excellence, and abundance of the lumber, and the general adaptability of the soil for the manufacture of bricks, cause these materials to be used for building almost everywhere throughout the State. The introduction of iron mouldings for the decorative portions of large structures prevents a demand for stone for such purposes. The Bank of California building, at San Francisco, is the only structure of cut stone of any magnitude, outside of the government fortifications, on the Pacific coast. Under such circumstances little attention is paid to opening quarries to test the quality of the stone. The consumption of stone is confined to granite for curbing and paving the streets, and the basements and steps for a few of the more costly buildings at San Francisco.

Marble, Limestone, &c. in California (circa 1867)

(pp. 241-246)

“The use of marble for domestic, artistic, and funeral purposes is very general in California, especially in San Francisco. Marble mantels, tables, and slabs are to be found in almost every residence, workshop, and store. The graves of all, save the utterly friendless dead, are adorned with marble tablet or monument of some kind. This taste has created an important branch of productive industry.

“There are fourteen factories engaged in the manufactures of marble in San Francisco, some of which employ 30 or 40 men. One has steam machinery for cutting and polishing the marble, and turns out 3,000 feet of slabs per month, in addition to tombstones, mantels, and other ornamental work. There are marble factories at Sacramento and Marysville, and one at each of the following towns in the interior: Stockton, Sonora, Petaluma, Santa Cruz, San José, Downieville, Folsom, and other places. Probably 1,000 persons are employed in California quarrying, transporting, and working marble.

“The consumption in San Francisco averages 500 cubic feet per month; the factories in the interior use about one-fourth as much; total consumption in the State, say 600 feet per month, or 7,200 feet per annum. The average price of marble at present is \$5 per foot. It thus appears that the value of the raw material used in this business amounts to \$36,000 annually. The value of manufactured marble in the State is estimated at \$2,500,000.

“The most singular suggestive feature in this business is presented in the fact that, although California contains an abundance of marble of great beauty and variety, most of that used in San Francisco is imported from Italy or New York. This fact may be attributed to the want of good roads and cheap transportation. It is found more economical to bring the raw material from Genoa, Italy, including transshipment at Bordeaux or Marseilles, than from the foot hills in the State, less than 100 miles from Stockton or Sacramento.

“There are two firms in San Francisco engaged in the importation of marble. Brigadelli & Co. are in the Italian branch of the business. They own a vessel of 300 tons register, sailing between San Francisco and Genoa. Large quantities are brought by French vessels from French ports. From June, 1866, to June, 1867, this firm imported 545 tons of Italian marble and had 600 tons more on the way, the whole of which was sold, leaving orders still unfilled. The present price of Italian marble is 50 cents per superficial foot, in slabs of seven-eighths of an inch thick; in blocks of ordinary dimensions, \$5 per cubic foot; blocks weighing several tons, at \$6 per cubic foot. California marble cannot be laid down in San Francisco at these rates. Myers & Co. import Italian marble from New York, where it is brought in vessels from Genoa. This firm also imports white marble from Vermont, which sells at \$15 per cubic foot, being used in the finer kinds of work. Some of the ornamental mantels in the homes of the wealthy cost \$750 to \$1,000 each.

“The marble dust used in the preparation of effervescing beverages is imported from New York. Five hundred tons annually are consumed, at a cost of about \$30 per ton.

“The cost of transportation, which gives the imported marble a monopoly of the markets along the coast, prohibits its introduction in the interior. All the factories in towns above Sacramento, Marysville, and Stockton use the native marble, because it is cheapest at these places. With reference to the quality of the Pacific coast marble, as compared with the imported article, the fact should be taken into consideration that it is excavated from near the surface. None of the quarries have been opened to any considerable depth; consequently the marble is scarcely as fine in color or texture as it will be found at a greater depth. Much of it, nevertheless, when compared with Italian, loses nothing in the contrast. Many samples of the California marble are superior. The block of white marble, from the quarry at Columbia, Tuolumne county, from which the sculptor Devine* formed the bust of the late Senator Broderick, compares favorably with the Carrara in color, texture, and purity.

(* *Patrick J. Devine, sculptor, located in Sacramento. Peggy B. Perazzo*)

“The recently-discovered quarries of black and white marbles near Colfax, Placer county, on the line of the Central Pacific railroad, will probably stop the importations from Italy. The beauty of the black marble from this locality, the exquisite polish it retains, and the advantage the owners of the quarry possess in railroad communication, which enables them to deliver it at San Francisco cheaper than the Italian, will probably give it the control of the market.

“There are many localities in California where quarries of marble are known to exist, but, with few exceptions, they remain undeveloped. A belt of limestone traverses the State from north to south, between the foot hills and the Sierras, said to be 20 miles wide, forming a prominent feature of the topography of the counties famous for placer gold, particularly in Tuolumne, Calaveras, Amador, Nevada, El Dorado, and Placer counties. This belt abounds in white or grayish marble; and it is not improbable marble of variegated colors will be found on more thorough examination, as local causes are known to control the color. In illustration, it may be stated that in the gulch on the south side of the road between Columbia and Gold Springs, Tuolumne county, there are bodies of marble of a jetty blackness, colored by manganese; on Matelôt gulch, about a mile to the east, there is a deposit of marble which, through the action of salts of iron, has been mottled with red, brown, yellow, blue, and green spots; on Mormon gulch, about three miles to the west, are masses of marble of very fine texture veined with pale green by the action of chlorine. This variety of color is not peculiar to that locality, but may be observed throughout the State. The Suisun marble, of Solano county, and the black and white marbles recently found near Colfax, Placer county, are cases in point.

“Little attention has thus far been paid to the marble quarries of the State, because the working of them has not been profitable, except in a few localities. As soon as railroads and cheaper labor shall remove existing impediments, they will probably become a source of profit, both to individuals and to the State.”

Limestone and Lime in California (circa 1867)

(pp. 244-245)

“Limestone and Lime. – The supply of these materials is abundant in nearly all parts of California. The great belt of limestone so frequently referred to furnishes materials for lime for the towns in the foot hills and among the Sierras; while in the coast range there are other calcareous rocks, which supply the demands for lime in the towns and cities along the coast and on the plains. The consumption of lime at San Francisco averages about 100,000 barrels annually, three-fourths of which is obtained from the vicinity of Santa Cruz, on the ranch of the Cañada del Rincon, where there is a supply of white metamorphic limestone, which makes good lime. Considerable quantities are also brought from Sacramento. Since the completion of the Central Pacific railroad in that vicinity, lime is brought to San Francisco from near Auburn and Clipper Gap, Placer county. About 5,000 barrels are brought to Sacramento monthly by the railroad, and the supply is increasing with the facilities for its preparation and transportation.

“The imports of lime at San Francisco, since 1864, have been as follows:

	Barrels
1864	73,553
1865	90,037
1866	<u>89,786</u>
1867 (for first six months only)	321,216

“Average price during this time, \$2.25 per barrel. The consumption of lime in San Francisco during the past three and a half years has cost \$722,736. The increase of brick and stone buildings during the latter half of 1867 has greatly augmented the consumption of lime.

“The construction of railroads and increase in buildings in the interior towns has also increased the consumption. The lime used for various purposes in the State annually probably exceeds \$1,000,000 in value....”