

**ANTIMONY.**—This metal is rarely mined in the United States, but California would not be true to her claims of precedence in minerals if antimony were not reckoned among her products. This is found associated with other metals, forming antimonial ores, but, in one instance at least, near Havilah, in Kern County, a vein is mined for its alone.

**TIN.**—The tin mines of San Bernardino County have attracted much attention, both from the rarity of occurrence of that metal, and its intrinsic value, but the deposits have not been found to be extensive or rich, and no great progress has been made in their development. The ore has been mined and tin produced therefrom, and the veins have been claimed as rich, but disputes of title to the land is given as the reason for not working the mines. Tin ore has also been found in other parts of the State, but no mines are yet opened. As we progress in developing our State, we will undoubtedly include tin mining as one of our resources.

**PLUMBAGO.**—This mineral bears also the names of blacklead and graphite, its familiar uses being the making and lining of crucibles, and as leads for pencils. It is found in various parts of the State, occurring in veins in the primary rocks in the same manner as the quartz veins bearing gold, silver, antimony, or other metals. Often the black oxide of manganese is mistaken for plumbago, and reports of rich veins are made. Although it is often found, it is generally in an impure state, and therefore of little value. A plumbago mine of considerable value has been worked in Tuolumne County, near Sonora, with encouraging success. At this mine the plumbago is mined and prepared at a cost of \$1 per ton, and with bags and expenses of shipping is delivered in England at a cost of about \$45 per ton, where its market value is \$100 per ton.

**PLATINUM, IRIIDIUM, AND OSMIUM** are found usually associated with gold, but are not sought or mined as a special industry. Deposits of platinum of several pounds weight have been found in washing gold-bearing gravel. It occurs mostly in the northern part of the State, the gold of that section, particularly that obtained along the ocean beach, being alloyed with iridium and osmium to a slight extent.

**MARBLE.**—As the miners delve in the rocks of the mountains in the persistent search for whatever treasure is hidden in their close embrace, many brilliant discoveries are made, and new and pleasing resources developed. The lofty Sierra and parallel Coast Range, great chains of granite and slate, are seamed and permeated with many strata of rich and beautiful rocks, some of the metalliferous veins we have heretofore noticed, and others of various character and uses. Countless is the number already brought to light, and still the work of exploration continues. Of the many valuable rocks disclosed, marble is not the least in importance. This beautiful stone is found in every quarter of the State, and where its veins or quarries are most exploited the finest and purest quality is obtained. The most noted quarries are at Columbia, Tuolumne County; Indian Diggings, El Dorado County; and near Suisun, in Solano County. From these large quantities of marble for household and monumental work have been obtained, and many large masses fitted for statuary. In a great many other localities are quarries where it is obtained both for the lime kiln and for ornamental work. California marble is generally clouded in white and gray, and in Placer and Butte counties are beds of black-streaked, streaked with white, all susceptible of a high and lustrous polish. The Suisun marble is of various shades of brown and yellow, resembling malachite, but is not so plentiful as in other localities. Recent explorations at Indian Diggings have opened a quarry which is said to equal in beauty and texture the famous marble of Italy, and in such quantities as would supply the world with the finer sort. At present, it is chiefly used in mantels and fire-places in dwellings, and in monuments, but as taste and refinement advance with wealth buildings will be constructed of the beautiful substances, and marble palaces and marble halls will adorn the streets of our cities and suburban towns.

**LIMESTONE.**—This being of the same composition, is closely associated with marble, but the coarser qualities are simply called limestone, and for use is calcined for lime. The most choice sources of supply of limo used in building and plastering are in Santa Cruz County and Cave Valley, in El Dorado County. Limestone is abundant in every section of the State, and is cheaply obtained in unlimited quantities.

**GRANITE.**—Stone for building or other purposes, either granite, basalt, sandstone, freestone, or cobbles lies on every hand, of the very best quality and profusion. At Folsom, Rocklin, Penryn and Newcastle are quarries of granite, whence large quantities are obtained and an unlimited supply remains requiring only the skillful quarryman to remove it from its primeval bed, and in such form and size of block as his ingenuity may devise. The basements of the State Capitol, the Custom House, the Mint and the Appraiser's Store are of granite from these quarries. It is also coming rapidly into use in small blocks as pavement for the streets, and in various modes its employment is increasing. Basalt blocks, chiefly from Sonoma County, are also largely used in street paving. For this purpose, too, the cobbles washed from the placers are used, and of these an infinite supply is at hand merely for the picking up. The localities of sandstone, freestone, clay for brick, and of other building material, would constitute too tedious a catalogue to mention; suffice that the State is supplied with every desirable variety without limit and with quality unsurpassed.

#### COAST FISHERIES.

The great ocean bordering our coast for more than 800 miles, the bays and rivers and the many interior lakes and mountain streams, furnish an inexhaustible resource in the finny tribes that swarm the waters, affording abundant food, luxury and manly sport. Long before the people of the United States occupied the country, the oil hunters of New England, as well as those of other Atlantic States, England, and Europe sought the northwest coast for their prey, and New Bedford, Nantucket, and many other cities based their wealth and drew their income from our waters. The sailors of the olden time were enchanted with the Pacific, its islands and main, and their witching wildness and wealth formed the themes of many marvelous tales. The early whaler pursued the Cetacea with great energy, and still the mammoth of the deep supplies a revenue to many seekers of its oily treasures. The chemist, however, by manufacturing fluids for burning, and the oils obtained from vegetables and land animals, and, more particularly, the discovery of the vast quantities of petroleum, have relieved the demand for whale or fish oil, and the business of the whaler is shorn of its former proportions.

Notwithstanding the price of whale products are now larger than when, twenty or thirty years ago, the business was pursued so energetically, the profits are, comparatively, not so great, or perhaps, other uses of capital are more attractive. In 1835 the price of sperm oil was 84 cents per gallon, whale oil 33 cents, and whalebone 24 cents per pound. The prices varied but little for a dozen years, though slightly appreciating. During and at the close of the war the prices rose to the highest, being, in 1865, \$2.25 per gallon for sperm, \$1.45 for whale oil, and \$1.71 per pound for bone. By the same list from the *Merchants' Magazine*, the rates in 1872 were \$1.45 for sperm oil, 65½ cents for whale, and \$1.28½ per pound for bone. The business was at its height in 1854, when were engaged in it 602 ships and barks, 28 brigs, and 38 schooners, aggregating 208,399 tons, and returning 73,996 barrels of sperm oil, 319,837 barrels of whale oil, and 3,445,200 pounds of bone, having an aggregate value of \$10,710,748.80. In 1872 the value of the product was \$2,950,288.80.

The California whale fishery is chiefly conducted by shore parties, having establishments at various points along the coast, as at Half Moon Bay, Pigeon Point, Monterey, Carmel Bay, San Simeon, San Luis Obispo, Goleta, Portuguese Bend, San Diego, and Point Abanda, which is just across the line in Lower Cal-