the State is subject, and which are so disastrous to the great wheat-grower and grazier, the small area required by the silk culturist can be easily irrigated, and no danger from such cause need be apprehended. The many thousand little valleys in the foot-hills of the Sierra Nevada, or of our other mountain ranges, are specially adapted to this purpose. There a fertile soil is found; irrigation, if needed, is convenient; the climate is most equable and free from severe winds; but few acres are required, and the product is as easily transported to market as was the gold which originally enriched the secluded ravines. By this means the impoverished placers can be re-enriched, and from the exhaustion and disfigurement of the gold washing, made perpetually productive with that which ornaments and improves while it produces.

Such lands are open to occupation as a free gift, or purchased at a trifling cost, and ten thousand families could make comfortable, yes, luxurious homes upon them. The market for silk, or the eggs, is unlimited, and while a judicious Government protects the cultivation by a tax upon the luxuries the wealthy indulge in, so long will the production be highly remunerative. The worm in California is found to be healthy, and the silk of the best quality known. Knowing all these facts, how great is the inducement to immigration, and to our present population to enter upon this branch of agriculture! When we contemplate that the silk industry of France has risen to the value of $170,000,000 annually, and that our climate and soil is more favorable, we can appreciate the importance of the culture to California. The failures of former years, or the decline of the excitement, cannot be held against the practicability of successful culture, as that has been fairly proven, and the importance is everywhere acknowledged.

Sugar Beet.—The production of the Sicilian Beet, and the manufacture of sugar from it, has progressed favorably during the past four years. In 1870 the California Beet Sugar Company commenced operations at Alvarado, Alameda County, where several hundred acres were planted, and a sugar mill of fifty tons capacity per day was erected. This mill continued work with some profit for three years, when, for reasons of cheaper land and cheaper fuel, the machinery and field of operations of the company were removed to Soquel, in Santa Cruz County. At Alvarado the land suitable for the sugar beet was valued at $200 per acre, and rental at the rate of $20 per acre was paid. At Soquel land is rented at from $4 to $5 per acre. The annual cost of fuel at Alvarado was $30,000, and more than half that expense will be saved in the better timbered region of Santa Cruz. The company purchases beets at $3.50 per ton, an acre producing about twenty tons; eight to nine per cent. being sugar. Several hundred acres have been planted in sugar beets at Soquel, sufficient to keep the mill running at its full capacity from the time of the ripening of the beets, in August and September, as long as they can be preserved in good condition, generally until April following. The results for the year 1874 are not yet ascertained, but are reported as very promising. The proprietors of this enterprise were Messrs. Bonesteel & Otto, who had experience in Europe, and were successful in establishing beet sugar manufacture in Wisconsin, before coming to California.

At Sacramento were made the first attempts in this branch of culture and manufacture, and for obtaining information upon the subject, the enterprising founders of the company dispatched a person to Europe, where he, for several seasons, observed the processes at the farms and sugaries. Notwithstanding these intelligent precautions, the establishing of the Sacramento sugary was accompanied by many reverses and disappointments. In 1873-4 complete success was reported. The sugary has a capacity of working 80 tons of beets per day, and a farm is planted of 750 acres, which produces from five to twenty tons per acre, yeilding an excess of 10 per cent. of sugar at the factory. At the Sacramento works operations commenced early in August, being a full month earlier than beets are in condition in other counties, or even in the cool climate of the bay and coast counties of this State. The sugary is run day and night during the season, thirty men, mostly Chinese, being engaged on a shift of twelve hours each.

The favorable results from these enterprises are most encouraging. They have demonstrated that California can produce sugar for consumption and for export. The present establishments are capable of producing from 4,000,000 to 6,000,000 pounds annually, but as from 40,000,000 to 50,000,000 pounds are imported, there is room for more.

Tobacco.—As with nearly every vegetable production in which California now claims superiority, so with tobacco, the fact of their adaptation to the soil and climate was only ascertained by trial and experiment. Many experiments in tobacco cultivation were made, and single stalks and beds were seen growing luxuriantly in different parts of the State as a rare plant, but its curing for the uses for which it is prized was deemed impracticable, but for reasons few could tell. Recently a process has been discovered and patented by Mr. J. D. Culp, of curing the weed, and with the aid of this it is now believed that California tobacco will surpass in excellence that produced in any other section of the Union, and equalling the renowned products of Cuba. This discovery has given a great incentive to the culture, and from the small experimental fields of a few years since there are now farms of hundreds of acres growing tobacco, the aggregate, in 1874, being estimated at 1,400 acres, chiefly in Santa Clara County, of which about one-third was of the Cuban variety. The successes have been so very great that the number of acres will be largely increased. The yield of the Cuban, or Havana tobacco is at the rate of about 1,200 pounds per acre, worth fifty cents per pound, or returning $600 gross per acre. The ordinary tobacco, however, brings a less price, but it is claimed that even this will return a profit of $200 per acre. The patentees of the curing process exact a royalty of twenty per cent. upon the gross crop of all those who arrange with them to adopt it.

Cotton.—Several of the staples of other States are contending for the first rank in this. Experiments have proven that "King Cotton" can flourish well on California soil, and its cultivation is advocated as far more profitable than the production of wheat. The most extensive experiments have been made by Colonel J. M. Strong, in Merced County, where one and a half bales were grown per acre, of better quality than is usually grown in the Southern States, and with less labor. One bale per acre is a large return in the Cotton States, and there the field must be plowed and hoed four times in the season; but the cotton grown on the Merced required hoeing but once. In the South, it is damaged and stained by the summer rains, and sometimes killed by frost, neither of which are to harm it in California. The cost of production in the most favored locality of the South is twelve cents per pound, while in California it is but eight cents. Such was the report of Colonel Strong in 1870, although the newspapers in the localities where cotton is most cultivated give the product at about 300 pounds per acre. The principal cotton fields are in Merced and Fresno counties, and it is also cultivated successfully in Colusa, Amador, Placer and other sections. In 1874 about 1,000 acres were planted in Fresno, and about the same in Merced, with an expected total product of 600,000 pounds of cotton, worth twenty cents per pound, the crop being reported as excellent. Such an amount will appear quite largely in the agricultural statistics, and will draw general attention to the subject. There are millions of acres of California soil adapted to the growth of cotton equally as well as the locality in Merced or Fresno counties, where the experiments have been made with such good results. This branch of agriculture opens another grand resource of the State awaiting development. The unrivalled water-powers afforded by the mountain torrents which pour into the valley from the high Sierra invite the manufacturer to apply them, and at no distant day we may expect to see near the fields where the cotton is produced the mills which prepare the fibre for market.

Fruit.—The capacity of California for the production of fruit is practically unlimited. The climate of lovely Los Angeles, where the grape, fig, orange, lemon, pomegranate and other tropical fruits grow to perfection in great fields and orchards, is the same as in the great valley of the Sacramento and other sheltered localities in the northern part of the State. The orange may be taken as an extreme proof of both capacity