

ing families which are comfortably and independently supported through the agency of this great industry. In addition to the lead obtained from the ores by these works, large quantities of gold and silver are also extracted. The chief source of supply for these works, has been the argentiferous galena mines of Cerro Gordo in Inyo County, whence has been derived during the past year some ten thousand tons of lead bullion. The silver-lead mines of Eureka, Battle Mountain, and other points in Nevada also send here a portion of their products.

This, both in mining and reduction, is a rapidly growing interest, and as there is no limit to the supply there is, practically, no limit to the market. In view of this, other works of a similar nature are projected in various parts of the country, some Eastern cities making most strenuous exertions to secure a precedence of the business. In Alameda County are two lead reduction works, where it is contemplated to so refine the metal as to fit it for the manufacture of paint, of which many thousands of tons is used annually. Here again occurs one of the anomalies of our business, that while we produce everything that enters into the manufacture of white lead paint, we send it all to foreign countries whence we re-import it with the added costs of freight, manufacture, waste, interest, other profits, and customs duties. As this is so connected with mining, the prospect may not be obscured by the brilliancy of that interest, as in the case of other branches of industry.

The Woolen Mills of San Francisco show a healthy condition, but not the progress it is generally thought the interest demands. The large profits in wool growing, and the many million pounds shipped East for sale, prove the adaptability of the country to its production, while the imports of woolen goods show the demand for fabrics of that material. Some of the products of our mills are of such a superior quality as to be exported in large quantities, competing successfully with those of any country. The two mills, the Pioneer and the Mission and Pacific, show a slight advance over former years. The first, situated at Black Point, is a factory of nineteen sets of carders, seven thousand eight hundred spindles, and sixty-seven broad looms. The building and machinery cost \$400,000, and the capital of the company is \$450,000. Last year they used one million five hundred thousand pounds of wool, worth \$300,000. They made five hundred thousand yards of cassimeres and two hundred and sixty thousand yards of blankets, etc. The total value of the manufacture was \$750,000. The amount spent in labor was \$30,000, which gave employment to three hundred and fifty hands, including one hundred white men, twenty-five women, twenty-five boys, and two hundred Chinese. The Mission and Pacific Mill takes first rank among the mills of the Pacific Coast; and proud of it as San Franciscans justly are, it appears insignificant when compared with some of the great mills of the Eastern States. The capacity of woolen mills is reckoned by numbers of sets of cards. The Mission and Pacific has twenty sets, and on the whole Pacific Coast are but eighty. In the State of Massachusetts are three thousand sets, a single mill at Lawrence having one hundred and twelve. Even the new State of Kansas exceeds California in its woolen manufactures, and little Rhode Island has one hundred mills and eight hundred sets of machinery. The Mission and Pacific, although having but twenty sets, claims a capacity of thirty-six sets, from the manner in which the mill is run. Added to these are seven thousand spindles and eighty-seven broad looms. The value of goods manufactured in 1873 was \$1,100,000; this year it will be \$1,300,000, showing an advance of over eighteen per cent. in one year. There was used altogether one million eight hundred thousand pounds of wool; this year there will be used two million two hundred thousand pounds. Of the wool used last year, there were one million four hundred thousand pounds Californian, three hundred thousand pounds Australian, and one hundred thousand pounds Oregon. Besides the wool there was also one hundred and fifty thousand pounds of cotton used, or about fifteen per cent. of the whole. The department for the manufacture of hosiery turns out about \$200,000 worth a year, the rest of the manufacture being made up of cassimeres, tweeds, shawls, flannels, blankets, and every variety of woolen goods. Some of the goods appear to be equal in make and finish to anything imported or foreign, and many of the cassimeres and tweeds are

of remarkable beauty. There are here constantly employed three hundred and eighty-seven white people and four hundred and fifty-six Chinese. Of the white people, eighty are men with families, eighty-five to one hundred boys, and the balance women and girls. The average pay-roll is from \$18,000 to \$21,000 per month. The white men employed earn, on an average, \$2.50 per day; the women from \$30 to \$40 per month, and the boys from \$4 to \$7 per week, averaging perhaps \$5. The Chinese employed earn about \$1 per day. The buildings of the factory on Fifteenth and Folsom streets, are seven hundred and ninety-three feet long by an average of fifty feet wide, and are two stories in height. The hosiery department by itself is two hundred feet long, and two stories in height. Besides these there are a dye-house and workshops and a large stone storehouse, one hundred and thirty feet long by fifty feet wide, two stories high, and capable of receiving two million pounds of wool. On arriving at the factory, the wool is first assorted and scoured. Then it is colored, picked, carded, spun, and afterward wove into cloth, blankets, etc. There are but two hundred and twenty thousand yards of cassimeres, tweeds, etc., made annually, which are worth from 95 cents to \$1.60 per yard. Every week there is sent from this factory, East over the railroad, a car load of goods, worth from \$25,000 to \$30,000. They work largely for the Government. Their goods go everywhere over the coast, to Japan, China, and British Columbia. The capital of the company, which is a close corporation, is \$650,000. The mill occupies three blocks of land, which were bought at a nominal price, but which are now worth from \$600,000 to \$700,000. The buildings and machinery are worth, at least, \$400,000.

Our wooden fabrics are diversified and important, although for some of the materials employed we are dependent upon Eastern supplies. This is especially the case in the manufacture of wagons, buggies, carriages, and other articles requiring the use of hickory, white oak, and walnut. We are fairly furnished with saw-mills; sash, door, and blind factories; cooperages; furniture manufacturers; billiard-table constructors; piano makers; wooden ware and broom manufacturers; boat builders and other similar concerns, numbering one hundred and twenty-two, turning out an aggregate annual value of millions of dollars of perfected articles.

A. S. Hallidie is proprietor of the only wire and rope works on the coast. The establishment went into operation in 1857, and has met with a large measure of success, the demand being somewhat urgent and steady. This gentleman has recently invented a cheap and ready mode for the conveyance of ores to mill, by means of buckets or cars suspended on wire ropes, which traverse mountainous ridges inaccessible to ordinary modes of transportation. The works are capable of supplying from twelve hundred to fourteen hundred tons of wire rope per annum, besides manufacturing largely in the way of screens, sieves, wire cloth, cables for suspension bridges, and other like articles.

The San Francisco Cordage Factory was organized in 1856, and has now grown into large proportions. The rope-walk has an extreme length of one thousand eight hundred feet, and the spinning department occupies a building two hundred feet long by fifty feet in width. The products of the works exceed four million pounds of cordage annually. The success of this establishment has induced the erection of a similar one near Alameda, on a large scale, which is now in successful operation.

Twelve tanneries supply the leather used in the city, with a considerable surplus for export. The products of leather constitute an encouraging feature in our manufactures. But a few years since, the boots, shoes, slippers, harness, saddles, etc., were almost entirely imported, the shoe and harness makers exercising their trade mostly in repairing. Now these, in a great measure, are of home manufacture, and the wealth derived has so stimulated enterprise in that direction that we now rank shoemaking as one of the most prominent of our local industries. Devoted to this branch are several large establishments, employing from three hundred to six hundred persons in each, turning out from \$3,000,000 to \$4,000,000 worth of goods annually. In the large factories, about half the employees are Chinese. These people quite monopolize the making of slippers, which

The Income of the ZEPHRA INS. CO. of Hartford amounts to nearly \$17,000 per Day, Henry Carlton Jr., Agent, 14 Merchants' Exchange, S. F.