

use, fourteen fire-engines, fourteen hose carriages, and three hook-and-ladder trucks. There are in the city sixty-one cisterns, capable of holding 1,648,900 gallons of water—many of them substantially built of brick and cement. Since December, 1856, there have been one hundred and four fires, and nine false alarms—out of the fires only fifty were such as caused loss. The total amount of the losses by fire since the date mentioned, is \$108,250.

We refer our readers to the Appendix, page 363, for a complete description of the organization of this important branch of the public service, in which will be found a mass of information concerning the different companies, useful to its members, and interesting to every citizen.

Review of Industrial Enterprises.

The Business Directory, published in the present volume, will best exhibit the progress already made in the different branches of Mechanical industry in this city. We propose in this review to make a brief reference to a few of the most important branches and to exhibit some very interesting statistics collected during the progress of our labors.

SAN FRANCISCO SUGAR REFINERY.

This establishment is owned by a company of San Francisco and New York merchants, organized by act of the Legislature of the State. The works of the company are located in the City of San Francisco, they are of the most extensive character, and of a capacity sufficient to supply the entire consumption of sugar in this State. The main building is seventy-five feet in width, by one hundred and twenty-two feet in length, and five stories high; several small buildings are attached for the prosecution of the different branches connected with the refinery.

The raw material consumed at these works is obtained from Manilla, Batavia and other Islands of the Pacific, and a line of clipper barks is now employed in maintaining a regular supply to meet the requirements of the company.

It is estimated, that four hundred tons of sugar and twenty thousand gallons of syrup per month can be manufactured at these works. The number of hands employed is one hundred and fifty. Cost of building and grounds, one hundred thousand dollars.

SAN FRANCISCO CORDAGE AND OAKUM MANUFACTORY.

The works are located in the vicinity of San Francisco. This enterprise was commenced in

April, 1856, since which time the operations of the company have been successful.

The buildings connected with the works are of the most extensive and permanent character. The main structure occupied as the rope-walk, is one thousand feet in length, and the spinning factory is one hundred by forty feet in length.

The consumption of the raw material is about four thousand pounds of hemp and three thousand pounds of oakum per day, which is obtained from Manilla, and arrangements have been completed for regular shipments thereof until California shall be able to furnish the same from the products of her own soil.

The enterprising projectors of this establishment have made arrangements for the importation of seed from Manilla to test the capacity of the soil of California for the production of hemp, and there is no reason why the article should not be produced here in a sufficient quantity to supply not only the home consumption, but a share of the demand existing abroad.

PACIFIC MATCH MANUFACTORY.

These works, recently erected by a company of practical workmen, are located on the corner of Brannan and Johnston streets. The machinery employed is of the most improved construction, and is believed to be of sufficient capacity to supply the entire consumption of matches in this State. The capacity of the works are about one hundred gross of matches per day, which can be increased whenever the demand requires it.

CALIFORNIA METALLURGICAL WORKS.

These Works, situated on Harris near Brannan street, have been in successful operation during the past eighteen months. They are both extensive and admirably adapted for the assaying of different descriptions of ore, and especially for the extraction of gold from the tailings of Quartz mills.

During fifteen of the eighteen months these Works have been in operation, but one furnace was used; during the last three months, two have been employed. The aggregate amount of gold extracted from quartz tailings and ores during this period, is \$150,000. The whole of this sum may be considered clear gain, and as two-thirds, or \$100,000, were paid to the owners of quartz leads, who have invested their money, as a general thing, in this State, the item becomes of considerable importance. About \$50,000 have been taken from sweepings, polishings, cinders from assay offices, etc.; and of this amount two-thirds, or \$33,333 00, have been paid to the par-