

capacity of the upper reservoir is 3,600,000 gallons, and of the lower, 7,800,000; the latter serving all the mains east of Powell street, except Rincon Hill and a portion of Telegraph Hill, which are supplied from the former—that having the requisite elevation for these lofty spots, as well as the many higher localities west of the first named street.

The pumping power of the works at Black Point is equal to raising to these distributing reservoirs about 2,100,000 gallons in twenty-four hours, proportioned to their relative capacity.

The Company have in use twenty-two miles and a half of main pipe, from which copious supplies are distributed to manufacturing establishments and dwellings, and by means of which 168 fire hydrants are made an available defense against fires. For this last purpose the water is furnished without charge. By a provision in its charter, upon due notice, the city and county of San Francisco may become the proprietor of these works, on repayment of the amount expended by the company, with reasonable interest. Until such purchase the water rates of the company are so far under the control of the Municipal Government that the company will not be permitted to exact higher rates than will afford a return of twenty-five per cent. per annum on their actual cash outlay.

#### 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.

#### FOUNDRIES, MACHINE SHOPS, ETC.

There is no department of mechanical industry in this city in which more enterprise and energy is exhibited than in the manufacture of machinery and the working of metals generally. There is probably no city in the Union that will bear a comparison to San Francisco in this respect. The number of establishments is estimated at 250, affording employment to about 1500 persons.

#### IRON FOUNDRIES.

The number of iron foundries is ten. Aggregate number of persons employed, from 350 to 500.

*Vulcan Iron Works Co.*—Successors to George Gordon & Steen. The Vulcan Iron Works, located on the corner of First and Natoma, were established in August, 1851, by Gordon & Steen, for the manufacture of steam engines and machinery. In January, 1855, they were converted into a joint stock incorporated company. Pres-

ent proprietors, S. Aitken, Paul Torquet and Charles R. Steiger, who have been with the concern from its commencement. These works have turned out about 300 engines and 600 boilers, with the machinery of upwards of 500 saw, flour and quartz mills, candle and starch factories, etc. All the hydraulic machinery for raising brick buildings in San Francisco, were invented and made at these works. The number of hands employed varies from 60 to 80. The business averages \$270,000 per annum.

*Pacific Foundry.*—Goddard & Co., proprietors. These works were established on their present location, First street, between Mission and Natoma streets, September, 1850, by Egery & Hinckley. The improvements consisted of a one-story frame building, 50 by 50 feet, in which a general foundry and machine business was transacted. December, 1853, the proprietors purchased the interest of the original owners—erected a three-story building, 30 by 60 feet, and added greatly, by improvements in machinery, etc., to former facilities for meeting the increase of trade. In December, 1858, another addition was made of a brick building, 60 by 80, which is used for melting purposes alone. The cupolas, three in number, have a capacity of melting 16 tons of metal per day. The works employ from 60 to 80 men, and the average annual business exceeds \$200,000.

*Union Foundry.*—Corner of First and Mission streets. P. Donahue, proprietor. Employ from 90 to 150 men.

*Fulton Foundry.*—Hinckley & Co., proprietors. These works were established by Worth, Hyde & Field, Sept. 8, 1855, as a machine shop; July 2, 1856, facilities were added for casting metals, and changed to present style of firm on the 6th of same month. The works are located at 47 and 49 First street, between Market and Mission, and at present keep about 50 hands employed in the different departments.

*Sutter Iron Works.*—These works were established on the corner of Folsom and Beale streets, January, 1850, by George K. Glynas, in connection with the International Navigation Company known as the Aspinwall Company. The buildings were not fully completed until September, of the same year, when the works were in full operation and did a very large business. Prior to September, 1850 the work that was transacted by this establishment, was, to a great extent, performed in the open air. These works are now