

of San Francisco, and supplying its inhabitants. The water is collected from various branches of the stream known as the Pilarcitos Creek, in the coast range of mountains, distant from San Francisco about fifteen miles in a southerly direction. This supply is taken at an elevation of seven hundred feet above the level of the sea, through the main coast range by means of a tunnel 1,500 feet in length. A large dam is now being constructed on the Pilarcitos Valley below the tunnel, which dam will be seventy feet in height and two hundred and twenty-eight feet between the abutments. This will cause the water to cover one hundred acres of land and make a reservoir that will contain 1,500,000,000 gallons, which will be filled during the winter season of the year, and be drawn from as required in the city reservoirs, making this the great retaining reservoir. From the east end of the tunnel the water is conducted around the hills into another large reservoir—Lake Honda back of the Mission Dolores—by a flume eighteen by twenty inches, with a grade of seven feet to the mile, being thirty-two miles in length. Of this distance six miles are laid of iron pipe, and when the flumes are to be replaced it will probably be done by iron pipe, of which about twelve miles would be required to make the entire route of iron. Lake Honda is a fine natural reservoir three hundred and seventy feet above the sea, from which place the water is brought to another distributing reservoir, corner of Buchanan and Market streets, by means of sixteen and twelve inch cast iron mains. The Market Street Reservoir is constructed on a high hill, two hundred feet above the sea, and is made of brick and cement; capacity 2,000,000 gallons. This is the main distributing reservoir, and supplies four-fifths of the city. The upper part of the city is supplied direct from Lake Honda pressure, which will give a good pressure to almost every section of the city. As to the quality of the water, it is now over two years since it was first introduced, and has been carried to every quarter of the world and given the greatest satisfaction to all that have used it. The amount of pipes of the company now laid reaches fifty miles in the city, and in the course of ten months an addition of ten miles more will be laid.

ADDITIONAL WATER COMPANIES.

About the first of August, Lake Merced, situate adjacent to the Ocean House and heretofore supposed to be an arm of the sea, was discovered to be a fresh water lake. Immediately after the discovery was made one of the fortunate discoverers began organizing a company for the purpose of bringing the water to the city for the use of our citizens. Unfortunately for himself he did not keep his intentions sufficiently secret, and the result is that a law suit has grown up which will probably last for a year or two. On the twelfth of August, 1864, the "Clear Lake Water Company" was incorporated by Messrs. E. W. Leonard, Thomas Bell, J. G. Kellogg, O. F. Giffin, R. L. Ogden, and Moses Ellis, who immediately petitioned the County Court to appoint a day when the owners of property adjacent to the lake in question should be required to appear in Court and show cause why their property should not be condemned to the use of the company. The Court accordingly fixed the twenty-second of August as the day. On the thirteenth of August Edward R. Carpentier, Henry Wetherbee, and Geo. H. Ensign, filed articles of incorporation of the Lake Merced Water Company, and learning what the Clear Lake Company had done immediately served notice on the property holders to appear on the eighteenth and show cause why they should not have the best and first right to purchase the grounds surrounding the lake. Before either of the above petitions were heard by the Court, a third Richmond appeared in the field. Reuben H. Lloyd, John

Nightingale, and Dennis Mahony, on the twentieth of August, filed articles of the incorporation of the Galindo Water Company, basing their claims upon the fact that they are the principal owners of the property in question, and consequently have the best right to the benefits which may accrue from the discovery that the lake is fresh instead of salt. Since the three companies were incorporated, the matter has been brought into Court, when able counsel appeared on behalf of each party and the respective claims were urged with fervor and ability. The Court feeling the responsibility and knowing the great importance of the matter in litigation, after hearing all the evidence took the matter under advisement, and has not yet (October 5th, 1864) rendered a decision.

Gas Companies.

CITIZENS' GAS COMPANY.

The Legislature of 1862, on the second of May, granted to Eugene L. Sullivan, Nathaniel Holland, and John Benson, a franchise to lay down pipes through the streets of the City of San Francisco, for the purpose of supplying the citizens with gas; the franchise extending over a period of fifty years. Shortly after the granting of this franchise, the company was organized by the filing of articles of incorporation with the Clerk of this County and the Secretary of State. The articles of incorporation were signed by Eugene L. Sullivan, Nathaniel Holland, John Benson, R. E. Brewster, John Bensley, E. R. Sprague, John A. McGlynn, James Brennan, T. Maguire, Wm. Sherman, A. C. Whitcomb, D. Northrop, W. F. Williamson, and Alfred Barstow, and placed the capital stock at \$2,000,000, divided into shares of one hundred dollars each. As soon as the company was completely organized an agent was dispatched east for the purpose of purchasing pipe and material for the erection of the works. An arrangement was soon effected with Mr. Jno. P. Kennedy, a well-known erector of gas works in New York, to furnish the plans and take the superintendence of the erection of their works. The company having purchased between two and three 100-varas of land fronting on the bay at the junction of Townsend and Second streets, work was begun early in the fall of 1863, and has been vigorously pushed toward completion. At the present time, although the works have not been completed, they have reached a state of advancement which give promise of a speedy completion. The reservoir will be completed about the first of December, 1864, and the remainder of the works by the first of March, 1865. On the first of October, 1864, a large quantity of pipe having arrived, the company placed a large force of laborers at work, who are now busily engaged in laying down the mains.

It is thought that the company will begin to furnish our citizens with gas about the first of March. One of the provisions of the company's charter make it imperative upon them to furnish the gas at a cost of not more than six dollars per 1,000 feet. The outcry made against the San Francisco Gas Company in 1862 by San Franciscans was, probably, the origin of the company; but be it what it may, the fact that it will be of vast benefit to the citizens of our city cannot be doubted, for the healthy competition which will result from the struggle of the two companies to furnish us with light, must have the effect to materially reduce the price.

Foundries, Machine Shops, Etc.

There is no department of manufactures and industrial enterprise connected with our city that has made such rapid progress during the past few years, as that included under this head. The number of establishments engaged in the working of metals