during his tour in Europe, reflect credit upon his taste and liberality.

Want of space prevents a reference in detail to the numerous public libraries in this city, prominent among which may be named the Mercantile Library Association, containing 20,000 volumes; Odd Fellows', 14,000; Mechanics' Institute, 7,500; Young Men's Christian Association, 3,000; California Pioneers, 2,000; San Francisco Verein, 4,000.

The Masonic Fraternity have made arrangements for the foundation of a library in this city. From the well-known character of those who have the enterprise in charge, it must soon take rank with the leading library institutions in the State. For list of officers, etc., of the different literary institutions in the city, see page 619.

Water Companies.

SPRING VALLEY WATER WORKS.

Capital stock $6,000,000, in 60,000 shares of $100 each.

Officers — W. F. Babcock, President; Calvin Brown, Superintendent; Henry Watson, Secretary; Lloyd Tevis, Charles Mayne, S. C. Bigelow, W. F. Babcock, N. Luning, H. S. Dexter, and John Parrott, Trustees.

The present organization is formed by a consolidation of the San Francisco City and Spring Valley Water Works companies, which took place on the first of January, 1865.

The San Francisco Water Works Company filed its certificate of incorporation on the nineteenth day of June, 1857, and on the twenty-seventh day of September of the year following introduced the water of Lobos Creek into the lower portion of the city, and in January, 1860, the permanent works were completed for the supply of the entire city with water. The Spring Valley Company was incorporated in June, 1858, and in July, 1861, the water from Islais Creek was introduced into the city.

The present works receive their supply from two sources—Lobos and Pillarcitos creeks. Lobos Creek is a stream of pure fresh water, emptying into the bay near Point Lobos, which supplies two millions of gallons daily. The distance of the stream is three and a half miles in a direct line from the Plaza. The receiving reservoir, with a capacity of 800,000 gallons, is located at Black Point, on the bay, from which the water is elevated by four double-acting pumps, with a capacity of 2,000,000 gallons daily, propelled by two steam engines of two hundred and fifty-horse power each, to the distributing reservoirs on the adjacent hills, the highest being three hundred and fifteen feet above high-water mark, located at the corner of Hyde and Greenwich streets; the second, which is situated immediately below, at the intersection of Hyde and Francisco streets, is one hundred and forty-five feet above high-water mark. The capacity of the first is 5,000,000 gallons, and that of the lower 8,000,000.

Pillarcitos Creek is situated in the coast range of mountains, distant from San Francisco about fifteen miles in a southerly direction. The water 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 1,600 feet in length. A large dam is now being constructed on the Pillarcitos Valley below the tunnel, which dam will be seventy-eight feet in hight and two hundred and twenty-eight feet between the abutments. This will cause the water to cover ninety-two acres of land and make a reservoir that will contain 900,000,000 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 thirty 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, with a capacity of 52,000,000 gallons, 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 1,750,000 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 who have used it. The Brannan Street Reservoir, also used by the company, has a capacity of 500,000 gallons.

The main dam above mentioned, (at this date, first December) is almost completed. The company commenced, in July last, a tunnel under the mountain separating the San Mateo from the San Andreas Valley, which will be 3,350 feet long, and will be completed in April, 1867—it will save nearly eight miles of the present flume—reducing the main line of conduit from thirty-two to twenty-four miles in length. This twenty-four miles will eventually be reduced to about eighteen miles—as proved by recent surveys.

The amount of pipe now laid in the city proper, reaches sixty-two miles.

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 to completion. Mr. B. P. Brunner has been elected the permanent superintendent of the works.

It is thought that the company will begin to furnish our citizens with gas about the first of January