to four inch. The Company also own the Lobos Creek property, which, by means of its aqueduct, a pumping apparatus furnishes two million gallons per day. The daily supply is at present in the neighborhood of thirteen million gallons. The Company has acquired the right to bring into their present works the water furnished by sixty additional square miles of water-shed, comprising on the Peninsula some of the largest coast streams south of Spanishtown; also the Calaveras Works, which control a water-shed of two hundred and fifty square miles. A dam, built across a narrow gorge at the lower end of Calaveras Valley, will form a reservoir that will contain thirty billion three hundred and fifty-one million gallons. From here the water will be conducted by an aqueduct, consisting of two miles of tunnel, twenty-two miles of pipe, and about twenty-four miles of open aqueduct, to Crystal Springs and San Andreas Reservoirs. Two independent pipe lines will convey the water from there to the city reservoirs. When the entire works are developed as proposed, the Spring Valley Water Works will have the following storage reservoirs: Pilarcitos Reservoir, containing one billion eighty thousand gallons, elevation above tide, six hundred and ninety-six feet; San Andreas Reservoir, containing seven billion gallons four hundred and fifty-three feet; Crystal Springs (upper and lower) Reservoirs, combined containing thirty-eight billion six hundred and thirty million gallons, elevation above tide three hundred and five feet; Calaveras Reservoir, containing thirty billion three hundred and fifty million gallons, elevation above tide, seven hundred and forty-five feet. Total storage capacity, seventy-seven billion sixty million gallons, which, being fed from a water-shed of two hundred and ninety square miles, the average annual yield will be between sixty billion and seventy billion gallons, or say two hundred million gallons for every day in the year. This quantity of water will supply two million inhabitants with one hundred gallons per head per day. The Spring Valley Water Works properly developed, therefore, can supply the City of San Francisco for at least sixty years to come.

The Legislature of 1873–4 authorized the Board of Supervisors to examine the sources of water supply and to purchase or condemn such as might be selected. In accordance with law T. R. Scowden was elected Water Engineer, and instructed to make an examination of the rivers, lakes, and watersheds which could be rendered available. After a series of extended surveys, he submitted a report recommending the purchase of Calaveras Valley, and its water-shed, located partly in Alameda and partly in Santa Clara County. The Spring Valley Water Company subsequently purchased the Calaveras property, after which the Supervisors negotiated for the purchase of the property owned by the Spring Valley Water Works. The price asked for the real estate and franchises of the Calaveras property was $1,000,000, and for all of its other property, $14,500,000. The Supervisors declined to make the purchase, and for the time being the city's effort to become the owner of a system of water works came to an end.

Other Water Sources.—The last Legislature authorized the Board of Supervisors to provide and maintain public water works for the city. Under this Act the Mayor appointed a special committee to examine the various sources of water supply. The Board elected a chief engineer, and are now awaiting his report upon the feasibility of either of the five projects under consideration. The first scheme considered was the Blue Lakes. There are three, and are situated in Alpine County, on the summit of the Sierra Nevada, at an altitude of over eight thousand feet above the sea level. The three have an aggregate water holding capacity of five billion five hundred millions. The estimated cost of the Blue Lakes scheme is $25,000,000. The distance from the city is two hundred and seventeen miles. Clear Lake, the second source considered, is situated in the central part of Lake County, at an elevation of one thousand three hundred and seventeen feet above the sea level. The lake is twenty-six miles long, of varied width, with an average depth of forty feet, and comprises an area of eighty-two square miles. It could furnish one hundred and nineteen billion gallons yearly. The estimated cost of this scheme is $22,000,000. Distance from the city one hundred and twenty-seven miles. The Laguna de la Merced is situated on the Peninsula, about six miles from the City Hall, in a southwesterly direction. It comprises two bodies of water, connected by a narrow channel, through which the more southerly and larger body continually flows into the smaller, with a moderate current. This lake has a north-westerly direction, and its southern extremity crosses the southern boundary of the county. The adjacent area, which conveys the rain fall to this lake, is about seven and one half miles square. The rain fall on this water-shed is estimated at three billion one hundred and fifteen million one hundred and forty thousand gallons a year. The estimated cost of this scheme is $2,223,177.20. Calaveras Creek is the principal south fork of Alameda Creek—rising in the most elevated regions of the Mount Diablo range. It is proposed to collect the waters of Calaveras Creek and the Arroyo Honda Creek, in an immense reservoir comprising the entire Calaveras Valley, by means of an enbankment across the narrow cañon at the outlet of the valley. The area of this immense water-shed is one hundred and thirty-nine square miles. The total yearly rain fall on this water-shed is estimated at nearly fifty-nine billion gallons. The estimated cost of this scheme is $10,655,052. Distance, thirty-eight miles.

Public Libraries.

The Mechanics' Institute contains thirty-two thousand volumes; of which about four thousand volumes were added during the past year; two thousand five hundred of the latter number are British Patent Office Reports; together with series of Guy's Hospital Reports, St. George's and St. Bartholemew's Hospital Reports. These are quite valuable additions. The