

there is little if any room for doubt but that in the future the city can satisfactorily fulfill the terms of the contract. This is from two reasons: first, by taking proper means to hold the water in Utah Lake back during the fall and winter, so that it will be up to compromise point when turned into the ditches in the spring, and second by repair made in the Jordan and Salt Lake Canal, by which the amount of water delivered at Sugar House Ward has increased from 25 per cent in 1889 to 40 per cent in 1890; by doing needed work on the canal the percentage of gain will increase from year to year. The Parley's Canyon water can be brought to the city by gravity, by building a conduit at an estimated cost of \$180,000. The other source of supply is on land owned by the city, near Liberty Park. The amount of water available from wells and springs is 3,250,000 gallons daily. To avail ourselves of this supply it is proposed to put in a pumping plant, at an estimated cost of \$142,000, with a capacity to raise 5,000,000 gallons per day, 283 feet, the height of our lower reservoir. The pump, boilers and buildings are estimated to cost \$42,000, and the pipe \$100,000, a large part of the pipe being from mains, as recommended by the water commission, and rightfully should be deducted from the cost of the plant. The city engineer, in his full and comprehensive report, recommends that the Parley's Canyon scheme, or gravity scheme, be adopted, and that steps be taken at once to bring the water into the city. While I agree with him, things being equal, that a gravity supply is most desirable, and fully approve of his recommendation, still, to provide for a possible insufficiency of supply from Parley's Canyon, as indicated by the scarcity of rainfall up to the present time, and the absence of the usual amount of snow in the mountains, I recommend that the pumping plant be put in as a further guarantee against a repetition of the scarcity of 1889. A pump of the capacity of five million gallons per day should be put in, as in the opinion of men of good judgment that amount can be developed by sinking more wells. The Water Commission of 1889 stated: "We desire to impress the fact that a daily supply of 3,000,000 gallons can be obtained in the vicinity of Liberty Park by sinking twenty-four wells, at a cost of \$20,250. While it is right to put in a pump with a capacity to raise the water to the upper reservoir, 283 feet, it would be needed but seldom, as the lower part of the city could be cut off by valves from the City Creek system and be supplied from this source. The cost of running the pump is estimated at \$50 per day to raise water 283 feet; if it was required to raise, say 150 feet, to supply a lower system, the cost per day will be proportionately reduced. It is not expected it will be necessary to run the pump the whole year round until our population shall be fully double what it is now, but only a few months in the summer and fall, or when the supply from other sources would begin to diminish." If both the conduit and pump are put in, we shall have a supply that I believe will enable us to do away with that part of the Jordan Canal within the city limits, which, if

properly repaired, will require an outlay of \$100,000, according to the estimate of the City Engineer, a sum which will go a long way towards the putting in of the pumping plant. The pump could be made to supply water through the pipes for drinking and culinary purposes, and the conduit to supply water for irrigation and take the place of the old canal which could then be filled, thus dispensing with what is now a menace to the health of the people.

As our city lots are divided and built upon and extensions of water mains are made, and water service through pipes is given to the greater part of the city, less water will be required to each inhabitant than now, when surface irrigation is largely required to take care of the gardens, trees, shrubbery and lawns.

There is an abundance of water within reach of this city, to supply it after it has maintained a growth the most sanguine can anticipate.

It is a question of money and how much the city is willing to pay for it, and for the necessary storage reservoirs. No effort should be left untried to make the supply ample for all future necessities.

STREETS.

The report of the supervisor of streets shows there has been expended in his department during the year the sum of \$67,693.82. This includes the sum of \$7567.60 in prison labor, which in consequence of the expense of guards and the unwillingness of the laborers is of but little value to the city. It also includes \$1929 poll tax labor. Of the total expenses \$19,177.31 was expended under the former supervisor of streets, who remained in office until March 15th, 1890, and \$48,516.19 was expended up to January 1st, 1891, by the present supervisor. He has collected and paid into the treasury \$5825.75 for poll tax, and sale of gravel and old material. The work done represents 11 6-7 miles of streets graded, which includes the grading of the north side of East Temple street, from Eagle Gate to Sixth East, at a cost of \$8609.25. Also 5 2-7 miles of streets graveled and repaired. The amount expended on the streets in 1890 is about double the sum expended in 1889. The work of improvement has not been confined to the main streets where they would be best seen, but the prayers of the taxpayers and citizens over nearly the whole city have been listened to, and the grading and repairing has extended over all parts of the city. Sections heretofore neglected have had their streets put in good condition. Considering there are about 230 miles of unusually wide streets, and the condition they were in at the beginning of the year and the work actually done, I think the supervisor may be commended for the good showing made in his report, and for the judicious use of the money expended in his department. The steam road roller purchased last spring has proved satisfactory. Though in constant use, it has required but a small sum to keep it in repair.

Since the completion of the sewers in District No. 1, property holders are being urged to make the connections with the sewers, so that no delay may occur when it is decided to pave the streets or make permanent sidewalks.

Paved streets are evidence of progress and enterprise, and tend greatly to the health and comfort of those who have to use them. I hope some of our principal streets can be paved this year and that the work may be commenced early in the spring. A difference of opinion exists as to the best pavement to adopt, considered with reference to cost, durability and comfort in its use. I recommend the subject to be taken up, thoroughly investigated, and some definite plan of action and selection of material be adopted.

SIDEWALKS.

Good sidewalks in a city are not only a comfort and convenience to the citizens, but add substantially to the adjoining property, and give the appearance of enterprise and progressive thrift. The width of the sidewalks, the expense of construction and the lack of cheap home material, have heretofore presented obstacles to this much needed improvement in the residence part of the city.

Some of these obstacles are so far removed that more rapid progress can now be made. A walk eight feet wide is sufficient outside of the business streets, and if the margins could be kept in grass by the adjoining owners, for which the city furnishes water free, the improved appearance of the streets would be apparent, and a gratification to all. Sidewalk districts have been formed, taking in a considerable portion of the city, and I trust there is public spirit and pride enough among our citizens and property owners, to see this system of public improvement carried out. I recommend where shade trees are destroyed in grading the streets and sidewalks, that the city furnish without charge trees from Liberty Park to replace them.

If other conditions will admit, I recommend that in our sidewalks and all other public improvements, home materials shall be used.

CITY ENGINEER.

The report of the city engineer is very full and complete and sets forth the work done in his department, and the receipts and expenses. The expenses are reported at \$18,241.65, and the receipts \$3272. The work of the city engineer is connected with nearly every important public improvement, such as water supply, streets, sidewalks, bridges, public and private surveys, etc., and is a very important department. Its records will always be valuable for public and private use and the city was practically without records, maps, and such information as should be kept in the engineer's office. The time has also come when a complete and authoritative system of city surveys should be made, and though it may be some years before this work can be fully completed, the expenditures necessary to make them will be amply repaid in the future. Much valuable information is given regarding the water supply in Utah Lake, and other points in which the city has water rights.

SUPERINTENDENT OF WATERWORKS.

The superintendent of waterworks makes a very full report and sets out all the results of a busy year's work in his department. The total expenditures in that department were \$177,959.35. He has laid 19 4-10 miles of pipe during the year, which cost