The Water Supply of the City

A Half Million Dollar Scheme Contemplated to Improve It.

In a very short time, probably before the present term of this year's city council terminates, a proposition, involving at least half a million dollars, will have to be confronted by the citizens of Victoria. To evade it is to leave sections of the city open to devastation by fire such as overtook all the residences between Quadra avenue and Princess avenue, to encourage the increase of insurance and to inflict upon the ratepayers the present inadequate supply of water which they have been compelled to put up with and have been complaining against for several years.

The waterworks system has got to be improved. The city has outgrown the old make-shift of a service; it has come to a period where prompt and judicious measures have to be adopted. It is conceded on all sides, even by the water commissioner himself, that an improvement is absolutely necessary, and how best to bring this about is the question that has now to be considered. Indeed, according to the city fathers, they have been giving it their serious attention for several months, even before the fire alluded to.

There are a few salient points about the present system with which possibly the average reader is not familiar. The waterworks have many defects, but possibly the greatest of all is that which is to be found in the patch work of the main on Douglas street. Here is a twenty-four-inch pipe, running all the way from Market street to the Carey road, which has as a feeder from the lake a twelve-inch main. What a reduction in pressure this means the ordinary layman can to a certain extent estimate. It is undoubtedly very great. Certain it is that at the point of connection there is but half the pressure in the larger that there is in the smaller main.

But there are other imperfections aside from the totally inadequate mains leading out of the lake. Chief among these is that branch pipes throughout the city are too small. With these in use, it will never be possible, no matter what amount of water is brought in from any lake, to obtain a pressure sufficient for the ordinary wants of the residents. This is a matter which will have to be considered, and which will add materially to the bill which the ratepayers will have to foot.

There are, too, the questions of reaching the higher levels, of introducing more pumping machinery, of changing, if necessary, the present source of supply and of going either to Goldstream or Sooke lake for water.

It is hardly necessary to refer to the manner in which the water is now obtained. Briefly, it is taken from Elk lake into three filter beds, which in turn empty into a large chamber about equal in size to the capacity of all, and from this it flows by gravitation into the city. There is an auxiliary pipe that runs direct into the lake, and in case of fire water can be brought direct into the mains out of the lake without being filtered.

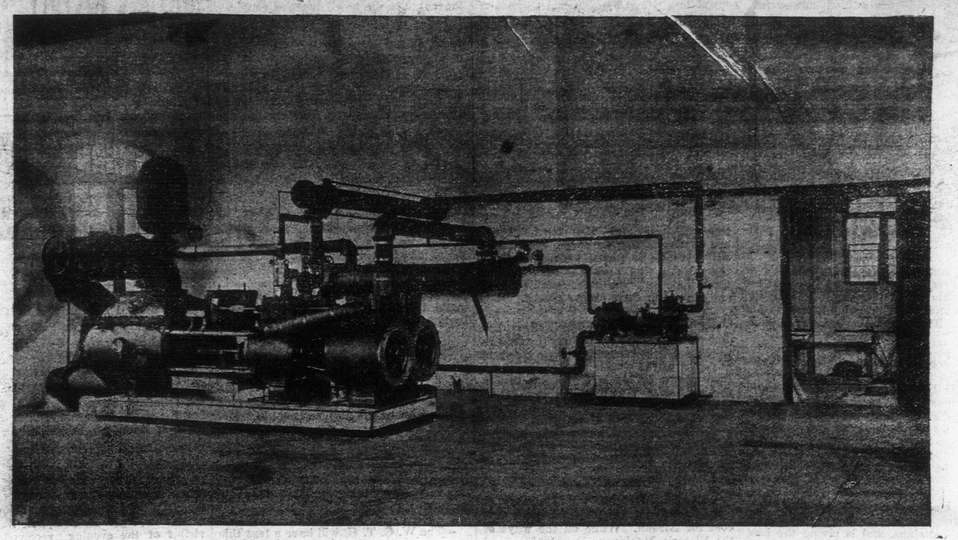
Originally the plan of the present system provided only for a twelve-inch main connecting the lake with James Bay via Douglas street. This was laid in 1873. In 1890 what is known as the Cook street extension was constructed, the size of this being sixteen inches in diameter. The improvement did not work satisfactorily or carry out fully the purposes for which it was designed because of the levels to which it was run being too high. It was then decided to put in the Yates street pump, but even after this was installed it was found that the pressure was insufficient for the higher levels, and so, in 1896, the North Dairy Farm pumping station was erected. What this accomplishes people generally do not appreciate, according to Water Commissioner Raymur. Its capacity is from a million to a million and a quarter gallons a day. Believed of this and the water service would be in a bad way.

The 24-inch main on Douglas street, which is fully a mile long, was laid during ex-Mayor Grant's time, when Mr. Summerfield was acting water commissioner. When Mayor Beaven came into office a stop was put to the big expenditure involved by the laying of the pipe, and though ex-Mayor Grant contemplated the extension of it to the lake his plan has never been carried out, and the city in consequence has to depend on the ridiculous system of a 12-inch pipe emptying into one twice its size. The big pipe cost the city $130,000 to lay, and to carry it on from Carey road to the lake would cost probably $250,000 more.

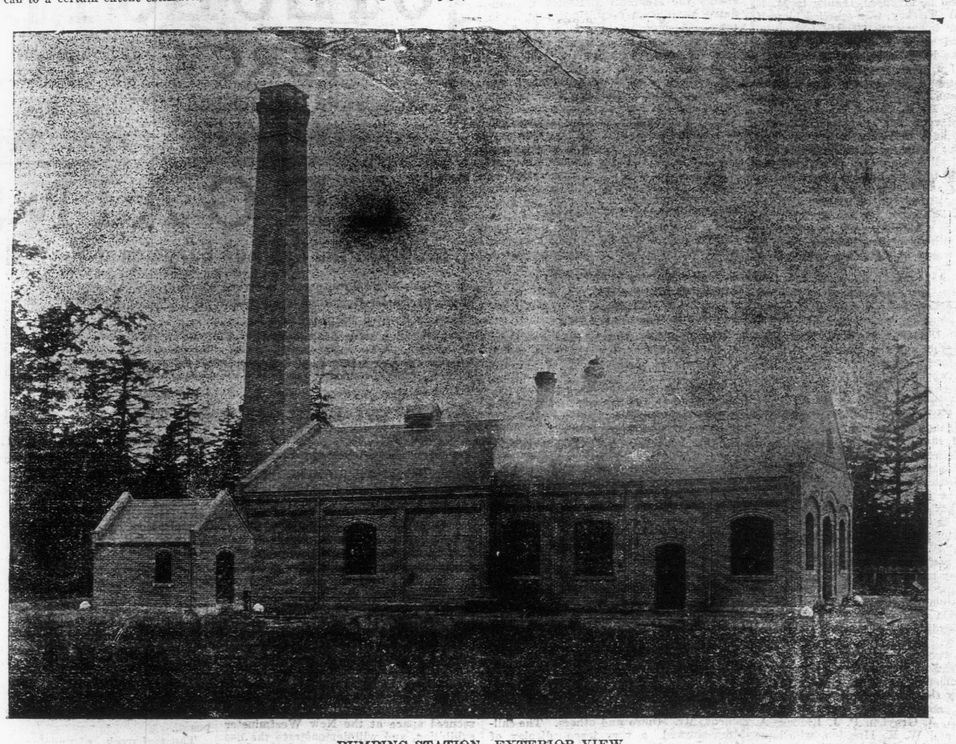
As stated above, only the Douglas street main was contemplated in the original plan. No provision was ever made for the main which now runs down Government street or for the numerous sections of the residential portions of the city which have since sprung into existence, such as Oak Bay, or for the sewerage system, for the higher levels, now considered among the most important parts of the city, for the Cook street and Fernwood road mains and for other demands, all of which entail a tremendous drain on the general supply.

When the scheme for changes and betterments is submitted to the people for their ratification one of the important considerations will be the question of pressure. It is argued that no matter how much water is taken from Elk lake—and there seems to be no denying that an abundant supply is there obtainable for all time—new pumping machinery will have to be provided. The pressure will have to be great enough to reach the higher levels from the mains leading direct from the lakes or from a reservoir to be constructed. The reason of this is that the highest parts of the city are 240 feet above sea level, while the elevation of the lake is only 180 feet. Whether it will be cheaper in the long run to improve the present system or to get the water from Goldstream will rest with the people to decide. Goldstream has an elevation of 470 feet above sea level. It is believed that the lake has a sufficient supply for all needs. It has about twice the rain fall that Elk lake has, and according to those in favor of this water more pressure could be obtained than would be required. The distance to the power house at Goldstream, where the B. C. Electric railway have their plant, is twelve miles. For every mile the water is carried ten feet elevation is deducted for loss of energy, but there would still be left gravitation enough and greater than the city would need. The cost of laying a 36-inch main to the power house would cost in the neighborhood of $550,000. No filter beds would be necessary, the water being simply conducted through an open ditch four miles long to an artificial lake, by which means the pressure could be reduced and the water purified sufficiently for the city's use. Of course if wooden pipes were substituted for metal ones the cost of installation would probably be about half the amount mentioned. The difference in distance between the two lakes is about five miles. The difference in the cost of introducing a new system would be in favor of Elk lake, but of maintenance and pressure decidedly to the advantage of the Goldstream scheme.

With the latter the matter of supplying Victoria West would be overcome, and an addition to the city's revenue secured. The whole of that section of the city bounded by Cook and Belcher streets, Rockland avenue, Belmont and North Pembroke street and of other high levels would no longer thirst of a warm summer day, and possibly for all time the question of water supply would be settled. The city is growing, and the number of subscribers on the water commissioner's books is increasing, it being now 4,700, as against 2,591 in 1891.

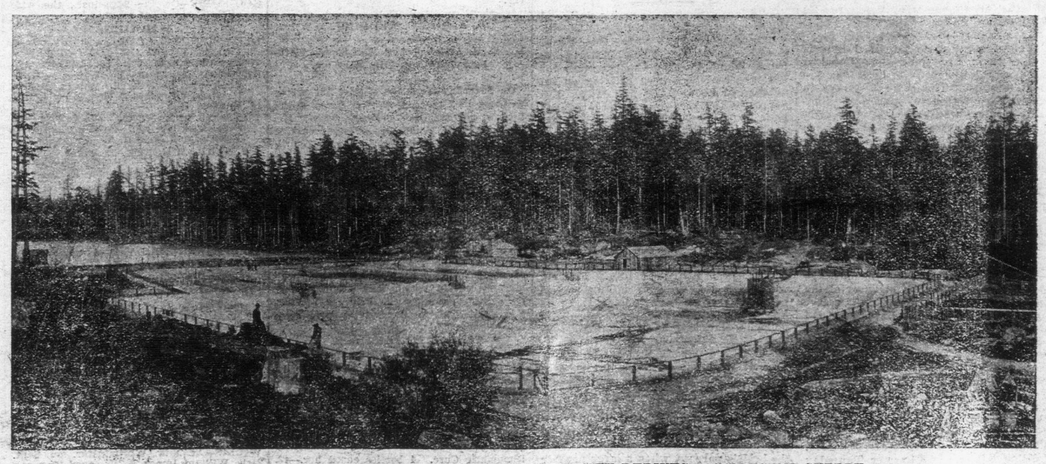


PUMPING STATION—INTERIOR VIEW—AUXILIARY AID TO GRAVITATION.



PUMPING STATION—EXTERIOR VIEW.

RESERVOIR AT GOLDSTREAM—NOW USED BY THE B. C. ELECTRIC RAILWAY COMPANY.



FILTER BEDS, BEAVER LAKE—FROM WHICH THE CITY DERIVES ITS PRESENT SUPPLY.

TORY SPELL BINDING.

Gathering of the Faithful Last Evening —Speech by Sir C. H. Tupper.

The junior Conservatives held a gathering in their club rooms on Thursday, which was addressed by the principal chiefs of the party in this part of the country. J. T. Croot, president of the club, presided, and among those present were the following: The Premier, Hon. Richard McBride; Sir Hibbert Tupper, president of the Liberal-Conservative Association of British Columbia; Hon. F. J. Fulton, provincial secretary; Mayor Barnard, Senator Macdonald, Thomas Earle, M.P.; Col. E. G. Prior, H. D. Helmcken, ex-M.P.P.; Wm. Mable, president of the Victoria Liberal-Conservative Association; Ald. Beckwith, Geo. Jay and other prominent members of the party.

The big attraction on the programme was Sir Hibbert Tupper, who made one of his usual entertaining deliverances, wholly devoid, however, of anything substantially new. He ran through the customary Tory gamut of charges against the Liberal administration and received a vote of thanks for his efforts. This is about the only return he will ever receive from his speeches in the campaign which seems imminent.

Premier McBride, Mayor Barnard and Hon. F. J. Fulton also did their utmost to make the Conservatives present believe they would have a "look in" at the next election, their endeavors being [illegible] supplemented by a rendering of the "Old Guard" by Mr. Wheeler. Cheers for the big guns of the party and the National Anthem closed the meeting.

SECURED MANY OPTIONS.

Representative of New York Syndicate Speaks Highly of Northern Quartz.

Tom Miller, who has been in the north securing options on quartz locations for New York capitalists, is on his way south from Dawson.

"I have bonded 14 claims," said Mr. Miller to the Dawson Yukon World, "and each of them I have personally inspected, and the ore from each has been assayed and shows good workable values. Assays have been made by local men and by the government assay office, and also at Ottawa. I am fully satisfied my people in New York will be pleased with the proposition I have to offer them.

"I have spent the last two or three days about the departments here, enquiring as to the prospect of getting in a road to the mines and other matters. I must say I find all your officials, from Mr. Congdon down, extremely courteous and encouraging. They seem desirous of doing anything they can to encourage the development of quartz, and this is one point that adds to my enthusiasm in regard to the properties I have been able to secure options on. One proposition such as I have, if backed by substantial capital and energetically worked, will make Dawson one of the leading quartz camps in the world.

"For, mind you, my proposition is only one of many exploited this year. One big company taking out and milling ore with success, will start a quartz boom here that will build up and populate a large section of the territory."

TIRED AND DEPRESSED.

The Condition of Many Young Women in Shops and Offices.

Thousands of young women have to depend upon their own efforts to gain a livelihood, and to these, whether behind the counter, in the office, the factory or the home, work means close confinement—often in badly ventilated rooms. There is a strain on the nerves; the blood becomes impoverished; the cheeks pale; there are frequent headaches; palpitation of the heart and a constant tiredness. If the first symptoms are neglected it may lead to a complete breakdown—perhaps consumption. What is needed to restore vim and energy and vitality is a tonic, and absolutely the best tonic in the world is Dr. Williams' Pink Pills. They actually make new blood, and bring health and cheerful energy to tired and depressed girls and women. Miss Viola Millett, Robinson's Corners, N. S., says: "I was a great sufferer from headaches, heart palpitation and troubles that afflict my sex. My blood seemed almost to have turned to water, and the least exertion left me weak and depressed. I used seven boxes of Dr. Williams' Pink Pills and they have made a remarkable change in my condition. I can truly say that I feel like a new person, and I strongly recommend these pills to all weak, ailing girls."

These pills cure all forms of blood and nerve troubles, but you must get the genuine with the full name, Dr. Williams' Pink Pills for Pale People on the wrapper around each box. Ask your druggist for them, or you can get them by mail at 50 cents a box or six boxes for $2.50 by writing the Dr. Williams Medicine Co., Brockville, Ont.

POET'S FORTUNE.

Westchester, Pa., Sept. 22.—Benjamin M. Everhart, botanist, poet and author, died to-day, aged 87. He was one of the most expert botanists in the world, 15 plans have been given his name. It is intimated that the fortune of $1,500,000, which he leaves, will go largely to charity.

CATARRH AND COLDS RELIEVED IN 10 TO 60 MINUTES.—One short puff of the breath through the blower supplied with each bottle of Dr. Agnew's Catarrhal Powder diffuses this powder over the surface of the nasal passages. Painless and delightful to use. It relieves instantly, and permanently cures catarrh, hay fever, colds, headache, sore throat, tonsilitis and deafness. 50 cents.—41.

FALL MEETINGS OF INSTITUTES

LECTURE ITINERARY HAS BEEN ARRANGED

The Speakers Will Start Their Work Early Next Month—Their Various Subjects.

The deputy minister of agriculture has arranged the programme of fall meetings of the Farmers' Institute. Following is the itinerary of Messrs. Daniel Drummond, of Ottawa, and Robert Thompson, of St. Catharines, Ont., whose subjects are:

Mr. Drummond—Selection and breeding of dairy stock; soil, moisture and cultivation; care and application of manure; talks on dairy stable construction and ventilation; the importance of selected seed to the farmer; rotation of crops.

Mr. Thompson—Poultry houses and incubators; profitable poultry keeping for the boys and girls; swine breeding and feeding; corn for grain and the silo; small fruits and fruit trees; gathering and marketing fruit; successful co-operation cold storage; the San Jose scale and other orchard pests; the future farmers and their education; home life on the farm.

Meetings.

Nanaimo—Monday, October 3rd, Gabriola; Friday, October 7th, Parksville; Tuesday, October 11th, Nanaimo or vicinity; Wednesday, October 12th, vicinity of Ladysmith.

Comox—Tuesday, Wednesday and Thursday, October 4th, 5th and 6th.

Alberni—Saturday and Monday, October 8th and 10th.

Cowichan—Thursday, October 13th, Westholme; Friday, October 14th, Duncans; Saturday, October 15th, Cobble Hill.

North Vancouver—Monday, October 17th.

Burrard—Tuesday, October 18th.

Richmond—Wednesday and Thursday, October 19th and 20th.

Maple Ridge—Friday, October 21st, Coquitlam; Saturday, October 22nd, Hammond or Haney; Monday, October 24th, Wharnock.

Mission—Tuesday, October 25th.

Kent—Wednesday, October 26th.

Salmon Arm—Friday and Saturday, October 28th and 29th.

Osoyoos—Monday, October 31st, Summerland; Tuesday, November 1st, Summerland; Wednesday, November 2nd, Peachland; Thursday and Friday, November 3rd and 4th, Kelowna.

Okanagan—Saturday, Monday and Tuesday, November 5th, 7th and 8th.

Spallumcheen—Wednesday and Thursday, November 9th and 10th, Armstrong and vicinity; Friday, November 11th, Enderby; Saturday, November 12th, Mara.

The itinerary of Messrs. Thomas McMillan, of Seaforth, Ont., and H. G. Reed, of Georgetown, Ont., follow. The subjects are:

Mr. McMillan—Breeding and management of heavy draught horses; breeding and feeding of beef cattle; soil cultivation, which includes land drainage and the care of farm yard manure; encouragement of Canadian agriculture; the journey of life.

Mr. Reed—Influence of natural laws in the breeding of live stock; the modern harness and saddle horse and how to breed them; the relation which exists between improper feeding and disease; diseases of the digestive system of cattle; milk fever in cows and preventive treatment.

Meetings.

Metchosin—Monday, October 3rd, Sooke; Tuesday, October 4th, Metchosin; Wednesday, October 5th, Colwood.

Victoria—Thursday, October 6th, Cedar Hill, Royal Oak or Colquitz; Friday, October 7th, Saanichton; Saturday, October 8th, Sidney.

Islands—Monday, October 10th, Fulford Harbor; Tuesday, October 11th, Ganges Harbor; Wednesday, October 12th, Mayne Island; Thursday, October 13th, Pender Island.

Delta—Monday, October 17th, Ladner; Tuesday, October 18th, East school house.

Surrey—Wednesday, October 19th, Mud Bay; Thursday, October 20th, Surrey Centre.

Langley—Friday, October 21st, Glen Valley; Saturday, October 22nd, Fort Langley.

Matsqui—Monday, October 24th.

Chilliwack—Tuesday, Wednesday and Thursday, October 25th, 26th and 27th.

Lillooet—Saturday, October 29th, Lillooet; Monday, October 31st, McGillivray's; Thursday, Friday and Saturday, November 3rd, 4th and 5th, Nicola.

Kamloops—Monday, November 7th, Campbell Creek; Tuesday and Wednesday, November 8th and 9th, Grand Prairie; Thursday and Friday, November 10th and 11th, any other points.

Besides addresses the delegates will give practical outdoor demonstrations on various subjects of interest, such as lessons in ploughing, live stock judging, cultivation of fruit, pruning, budding, grafting, etc., points of dairy and beef cattle, and other subjects of a similar objection to accompanying her father to character.

DAMAGE REACHES MILLIONS.

Portland, Ore., Sept. 23.—Timber men who have visited Columbia county reported that recent forest fires in that section have destroyed timber to the value of $8,000,000. Most of the timber destroyed was owned by eastern capitalists.

ENGINEERS AT OTTAWA.

Ottawa, Sept. 23.—The British engineers who are on their way to the international congress of engineers at St. Louis are guests of the city to-day. They received a royal welcome, and had luncheon at the Victoria hotel, Aylmer.

SPEECHLESS AND PARALYZED.—"I had valvular disease of the heart," writes Mrs. J. S. Goode, of Truro, N. S. "I suffered terribly and was often speechless and partially paralyzed. One dose of Dr. Agnew's Cure for the Heart gave me relief, and before I finished one bottle I was able to go about. To-day I am a well woman."—43.