## CHAPTER VIII

## FALL RIVER TO-DAY

Its Attractive Situation and Advantages. Bright Prospect for the Future. Fine Water Works System

Fall River to-day is a thriving community of 110,000 people, industrious and energetic, tacing the future with confidence in the greater days that are to come. It is most attractively situated on granite-ribbed hills on the easterly shores of Mt. Hope Bay, an arm of Narragansett Bay, but 20 miles from the open sea, and is blessed with mild winters and cool breezes in summer, while across the bay a most beautiful view of rich farming lands, interspersed with rivers, is unfolded to refresh the eye, and in the distance Mt. Hope, the home of King Philip, the Indian chieftain, rises in silent majesty. Had it not been a manufacturing community, Fall River might have become one of the most popular summer resorts on the Atlantic coast, for nature has richly endowed it with beautiful surroundings.

The water power that is developed by the stream from which the city takes its name, however, early turned the minds of its citizens to its value in the production of wealth, and one after another great mills have risen, first on the river and then in other sections till now the city is the foremost center of cotton manufacturing in the new world, with 3,300,000 spindles, employing 35,000 hands and using annually more than 400,000 bales of cotton. These factories represent an investment of \$40,000,000 at a moderate estimate, and are very largely owned by thousands of stockholders resident in the city. They produce a billion yards of cloth in a year, or nearly 1,900 miles for every working day, with a product ranging from the coarsest cotton goods, such as shoe linings, to the finest lawns and ginghams, with a marked tendency toward the finer goods that is growing stronger each year. The city also has extensive plants for the production of Marseilles quilts, comforters, cotton for surgical use and scores of other purposes.

With the mills for manufacturing cotton

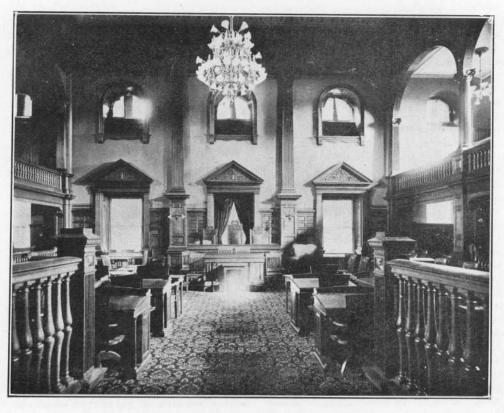
cloths have risen great establishments for bleaching and printing the product, machine and belt shops and various smaller industries to supply the needs of the factories. There have also grown up large plants for the manufacture of hats and thread, and many smaller industries, like piano making and the manufacture of braid, are making a start and promise to develop into large factories. The city's population is cosmopolitan and the people quick to learn new duties to which they may be called.

Exceptional advantages for the shipment of goods by water are offered through the safe and broad harbor, deep enough for the large vessels. Three lines to New York, the famous Fall River Line of the New York, New Haven and Hartford Railroad Company, the more recent Enterprise Transportation Company and the Joy Steamship Line, furnish daily communication with the metropolis. Steamers of the Dyer Transportation Company make daily trips to Providence and the Winsor Line ships sail three times a week to Philadelphia. Fall River is a port of entry, and in point of tonnage registered the seventh in importance on the Atlantic coast.

Its railroad facilities are excellent, with large freight yards conveniently situated and lines of the Old Colony Railroad, now leased by the New York, New Haven and Hartford, radiating in four directions, with frequent and comfortable trains. The Providence line has been equipped with electricity, and trains on that road are run practically every half hour. All the grade crossings on the main line within the city limits have been abolished. Electric street cars run to all sections of the city, with six tickets for 25 cents, and a general transfer system. Lines have also been built to Providence, Taunton, New Bedford and Newport, and on two of these—those to



Main Staircase and Entrance to City Hall



New Aldermanic Chamber, City Hall

Providence and New Bedford—au electric freight service has been inaugurated.

The city has 138 miles of public streets, many of them paved and macadamized, large and efficient fire and police departments and 66 miles of sewers. Its schools are of the high standard required in all Massachusetts municipalities, with modern and adequate buildings and competent teachers. A splendidly quipped textile school has been erected and has a growing attendance. The public library has 70,000 volumes and is housed in a new and convenient structure. An excellent beginning has been made in the development of a park system, which now comprises 100 acres. Pure water in abundance is supplied from a lake running parallel to the bay two miles from the shore. The valuation of the city, May 1, 1905, was \$81,754,-247. The tax rate that year was \$18.80 a thousand. The total area of the municipality is 41 square miles, with an extreme length of 11 and extreme width of 71/2 miles. It is the fourth city in the Commonwealth in area, the sixth in valuation and the third in population.

Four national banks, a trust company, four savings banks, and the same number of cooperative banks furnish facilities for the transaction of business, while hotels, clubs, lodges, churches and theatres supply other needs. There is a large Young Men's Christian Association, with a new and well equipped home, a model Boys' Club, a Home for the Aged and various hospitals and orphanages. Three daily newspapers are published here in the English language and one in French.

While the population is to a large extent that usually found in manufacturing centres, the character of the residences is better than what is commonly expected. The mill blocks for the operatives are no longer built and those already standing are giving way to more comfortable and attractive dwellings. The number of citizens of moderate means is large and constantly increasing, though with but few rich citizens, and within the last quarter century hundreds of dwellings that would be a credit to any community have been erected and whole sections of the city have put on an air of prosperity and comfort that is a continual surprise to visitors who have seen but one side of the life here. This, with the healthful and attractive situation, the pleasant drives, the improvement in the stores and the easy means of access to larger cities, is making Fall River each year more and more a residential city.

The marvellous growth of the city since the civil war, from 17,000 to 110,000, a gain of, roughly, 550 per cent. in 40 years, has not until recent years allowed the development along some lines to as full a degree as desired. Large expenditures for schools, sewers, water works and fire and police departments have been absolutely necessary, and other public works, though they have received attention, have not been carried forward so rapidly as could be wished. Within the last few years these have been enabled to be pushed with more vigor, and parks, streets and sidewalks are now in a fair way to be brought to a higher standard.

The community has suffered severely through labor troubles and depressions in its chief industry, but has met these bravely and has risen from each stronger than before. The spirit of the men who have made Fall River what it is still lives, in unabated vigor, and can be trusted to carry the city steadily on to greater and greater prosperity. A population of 150,000 fifteen years hence is not too much to expect; it is practically no larger gain in residents than has been made during the fifteen years just past. Every one who has the community's interests at heart confidently believes that the best is yet to be and will do his utmost to bring it to pass.

The excellent water works system is justly one of the sources of pride on the part of the citizens. The source of supply is the beautiful North Watuppa Lake, within two miles of the centre of the city, with an area of 2.821 square miles, at an elevation above tide water of 129.42 feet and a watershed of 8.623 square miles. The water is remarkably pure, and in recent years steps have been taken to preserve it from contamination by the purchase of land surrounding the pond. The lake is fed almost entirely from its watershed and small streams which collect the water from the surrounding hills.

The North Watuppa will undoubtedly furnish an adequate supply for years to come, but if with the growth of the city an additional source is needed, the adjoining South Watuppa can be drawn upon. The two lakes, separated by a dam at the Narrows, are 72-3 miles in length, with an average width of three-quarters of a mile and a total watershed of 27.54 square miles. They are capable of furnishing a daily water supply of 35,000,000 gallons, or about eight



Old Aldermanic Chamber, City Hall

times the average daily amount pumped in 1905, while the North Pond alone will furnish nearly three times the present consumption. Other ponds farther south are also available if a greater supply should become desirable. All have their outlet in the Quequechan River, running through the centre of the city to the bay, which furnished the water power used by the early mills and still runs some water wheels in addition to supplying a large amount of water for the boilers of various factories and the use of the American Printing Company.

The water works were built in 1873 to replace the wells which were in general use throughout the city, and especially in the more densely populated section, as well as to provide more adequate facilities for fighting fire. An analysis of the water of the lake had been made in 1870, which showed that it was unusually pure, with only 1.80 grains of solid matter to the gallon. The first board of water commissioners, consisting of Philip D. Borden, William Lindsey and Joseph A. Bowen, was elected by the city in the spring of 1871, and in the fall of the same year work was begun upon a road which it was necessary to construct for nearly a mile and a half to give access to the site selected for a pumping station at the easterly end of Bedford street. The foundations for the engine-house, boiler-house and coal-house were bunt in 1872, and the superstructure completed the following year, of granite quarried in the immediate vicinity. A granite tower, containing two standpipes, one for low-service, 48 feet above the highest point of the main pipe, and one for high service, 88 feet above the top of the high pressure pipe, was also erected. It has a base 21 feet square and a total height of 121 feet. A balcony on the outside of the structure, at a height of 72 feet above the base and 324 feet above sea level, gives a commanding view of the surrounding country.

The first engine was built in 1873 by the Boston Machine Company and pumped the first water through the pipes to the city in December, though not for general use till January 8, 1874, taking its supply from the gate house in the pond, 225 feet from shore and ten feet below high water mark. Other engines have since been added, so that the station now has five running divisions available, with a capacity of 18,000,000 gallons in 24 hours, divided among the three pumps, as follows: The Worthington, built in 1875, a 5,000,000 engine; the Davidson, No. 1, con-

structed in 1883, of 5,000,000 capacity, which consists of two 2,500,000 engines, and the No 2 Davidson, dating from 1895, which can also be run in halves, with a united capacity of 8,000,000 gallons. All are in good condition, and are run by four boilers, housed in two separate localities, thus diminishing the probabilities of a crippling accident to a large extent.

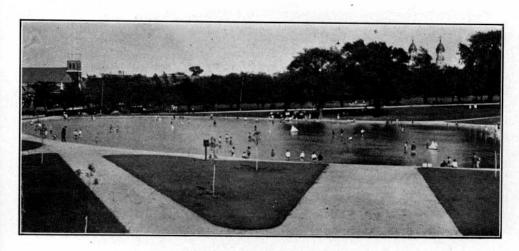
The first pipes were laid at the time of the construction of the pumping station, and by September 1, 1876, amounted to 45.13 miles, of from 6 to 24 inches. These have been extended from year to year, with 15,243 feet laid in 1905, giving a total length on January 1, 1906, of 100 miles. The hydrant system has also been extended, with 39 new hydrants erected in 1905, giving a total at the beginning of this year of 1,130. There are 91 watering posts and 21 watering troughs.

The tank system had its inception in 1886, when the first tank was erected on Townsend Hill. In 1892 the second tank was built near the stand pipe tower on Bedford street, and five years later the Haskell street tank was erected. The capacity of the tank in the southern part of the city (Townsend Hill) is 1,161,448 gallons; that of the tank in the eastern section (Bedford street) is 1,389,976 gallons; and the one in the northern district (Haskell street) supplies 1,365,153 gallons. The united capacities are 3,916,577 gallons. Excellent results have followed the introduction of the tank system, as shown in the more even pressure, the better maintained head, and the reserve supply at hand for sudden demands such as might be made in case of fires or other occasions calling for a large immediate draught from the mains. The average pressure is 80 pounds to the inch.

The total cost of construction to December 31, 1905, was \$2,057,624.90, of which \$25,-206.69 was expended in 1905; the total expense of maintenance to the same date was \$4,014,058.64, of which \$129,490.09 was for 1905; and the total revenue \$3,970,576.12, of which \$180,191.27 was received in 1905. The expenditures in 1905 included \$23,507.26 for extensions, \$34,938.50 used by the reservoir commission in the purchase of land to protect the purity of the water, and \$86,717.50 paid for interest. The excess of revenue over the cost of maintenance in 1905 was \$50,701.18.

The funds for the building of the system were provided by the issuance of bonds, and were supplemented by city appropriations from 1875 to 1897, inclusive, amounting in all to \$773,800. The gross bonded debt January 1, 1906, was \$1,650,000, the value of the sinking fund \$588,544.42 and the net debt \$1,061,455.58. Of the bonded debt \$200,000 is the reservoir loan. The average rate of interest is 4.37 per cent. A total of \$325,000 was paid in 1905 from the sinking fund for a reduction of the debt. In 1904, \$125,000 was paid for the reduction on the debt from the accumulated earnings. The department has been on a paying basis since 1897, and the sinking funds will take care of the debt from now on.

The total number of gallons of water pumped in 1905 was 1,608,651,704; the average daily consumption, 4,407,265, and the which 933 favored the project and 89 opposed. George A. Briggs was engaged as chief engineer, William Rotch as assistant and James P. Kirkwood as consulting engineer, and the work progressed as noted above. Charles H. Churchill was the first clerk of the board and water registrar, and was succeeded February 10, 1879, by William W. Robertson, the present clerk and registrar, who had previously been his assistant. Caleb C. Potter and J. W. Milne have been clerks since March 1, 1879, and March 18, 1883, respectively. Patrick Kieran, the superintendent, has been connected with the department since March 1, 1872, when he was appointed superintendent of pipe laying. He became superintendent of the department



South Park, View of the Wading Pool

average to each inhabitant per day 41.34 gallons. The number of meters in use January 1, 1906, was 7,523.

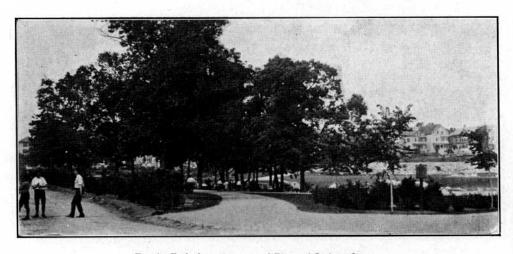
The water works had been urged for years before actual work was begun, but the first steps were not taken until a few days after Mayor Samuel M. Brown's inaugural in 1870, in which he urged the necessity of action. A committee was appointed shortly after this, and on November 29, 1870, 48 acres at the head of Bedford street were purchased. W. J. McAlpine, a civil engineer, was engaged to make a report on the matter and prepare plans, and on March 23, 1871, the Legislature authorized the work when approved by a majority of the voters. This was obtained at an election April 10, at

on May 10, 1886. His predecessors in that office were Messrs. Briggs, Rotch, William Carr, Jr., and A. H. Martine. The office of the department was in City Hall until July 23, 1900, when it was removed to a new building on Third street, where the repair shops are also situated. The present board consists of William Biltcliffe, president; Joseph Watters and Daniel J. Sullivan.

The purity of the water in the ponds has been largely protected by the purchase by the city of land on its shores under the direction of the Reservoir Commission, and further purchases are constantly being made. The commission was established under a city ordinance passed on April 25, 1895, and the first board, appointed by Mayor Greene

on that date, organized on June 10. It consisted of Jeremiah R. Leary, Samuel Watson, George H. Eddy and the Mayor and city engineer, ex-officio, and it at once proceeded to make an investigation of the watershed of the North Watuppa and the streams flowing into it as to the danger of contamination. In view of the fact that the legislative act giving the city the right to condemn land on the shore of the pond in the town of Westport to two years, a beginning was made there. Efforts to purchase the land desired were unsuccessful, and on March 7, 1896, the commission condemned the land needed, 64 1-7 acres, all of which has been settled for. The next section to be taken was on the westerly shores of the pond, within the city caused arose, and an exhaustive study of the capacity of the ponds, the amount of the discharge of the streams, the extent and character of the watershed of the North and South Watuppa, the evaporation, rainfall and flow of the North into the South pond was made by the city engineer, with Arthur T. Safford of Lowell, consulting engineer. Measurements were carried on continuously from January 1, 1899, to December 31, 1901, and an extended and valuable report, with recommendations, was made in 1902.

The commission was abolished by city ordinance June 5, 1905, and its duties devolved on a new board consisting of the three members of the water board and the Mayor and city engineer, ex-officio. Up to



Ruggles Park, from the corner of Pine and Seabury Streets

limits, where the same method was pursued, and on April 3, 1897, a strip extending back from the shore from 200 to 700 feet, with an average width of about 400 feet, and running from land of the Crystal Ice Company to the New Boston road, was taken. In the following December a further condemnation was made of "all the Islands in the North Watuppa Pond . . . The whole of said pond below High Water Line of said pond. . . . Also all the water of said pond and the land under said pond."

As it appeared possible that it might be necessary to divert certain streams emptying into the pond, the question of the result of the diversion and the possibility of replacing from other sources any deficiency

May 10, 1906, the total amount of land acquired was 2,746.95 acres, at a cost of \$213,035.85, which had been met partly by loans and partly from the revenues of the water department. By city ordinance all further purchases are to be made from the water works funds, The commission has in all cases purchased the land it desired instead of prohibiting its use, as has been done in some other cities.

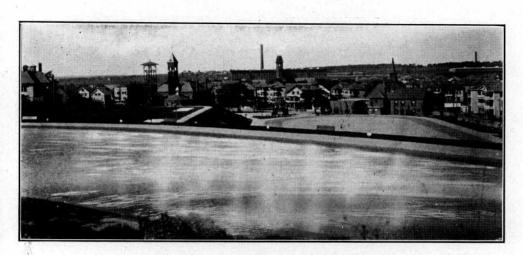
The city's park system consists of three parks of nearly 100 acres, of which about 75 have been improved, and three small tracts known as Durfee Green, Cambridge Green and Eastern avenue. Since the appointment of a park commission by Mayor Grime, in 1902, a notable advance has been made in

the development of these lands, with the aid of loans aggregating \$182,000, and though much yet remains to be done, the parks are now very creditable to the city, and when completed in accordance with plans already formulated will do much toward its adornment and attractiveness,

The largest of the three principal parks, the South Park, comprises 60 acres, lying between South Main street, Bradford avenue and Middle street, and extending westward to the bay. It was purchased in 1868, and in 1871 was laid out from South Main street to Broadway, but the remainder was left untouched. The North Park, of 29 acres, was originally a part of the city farm and was set aside for park purposes in 1883, but prac-

of Brookline, were secured as architects of the local park system, and the improvements that followed were in accordance with his plans.

During the summer the regrading and general improvement of the South Park was carried on, and four lots adjoining the park on the north and bordering on the bay were purchased. The eastern section was completed the following year and work on the tract between Broadway and Bay streets begun. Ruggles Park was graded, turfed and made to assume its present attractive appearance. In 1904 work was started on the North Park, which also required extensive grading, and the western half completed the following year. The smaller parks also received attention.



North Park, View across Wading Pool, showing a portion of the Running Track and the location of an Out-door Gymnasium

tically nothing was done for its development till 1904. It is in the northern part of the city, between Highland avenue on the east, North Main and High streets on the west, Hood street on the north and Brownell street and President avenue on the south.

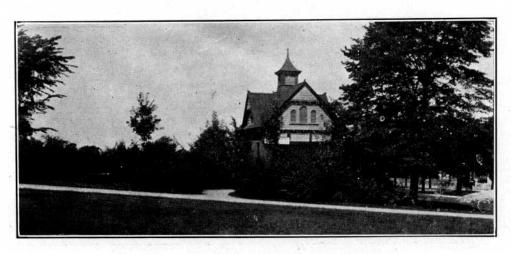
The new board took oath of office on May 5, 1902, and organized with Mr. Small as chairman and Mr. Doherty secretary. The control of the public cemeteries, which had formerly been in the hands of a committee of the City Council, had fallen to the new poard under an act approved April 1, 1902, and Charles Smith, then acting as superintendent of Oak Grove Cemetery, was elected superintendent of parks and cemeteries. The firm of Olmsted Bros., landscape architects,

Ruggles Park, named for park purposes June 10, 1895, was part of a tract of 12 acres purchased in April, 1868, which was reduced by the cutting through of Pine and Seabury streets. It was formerly part of the Rodman farm, known as Ruggles Grove, whence the name. It lies between Seabury, Pine and Locust streets contains 8.6 acres and was waste land, used for a dump until the summer of 1903. Durfee Green and Cambridge Green are small, triangular tracts, of 23 and 14 rods, respectively, at the intersection of streets, and "Eastern avenue" consists of two strips of a width of about 10 feet, separated by a path, and in the centre of Eastern avenue. It is about 1,450 feet in length.

As has been said, very little had been done

for any of these tracts, except for the eastern section of the South Park, prior to the appointment of commissioners in 1902. This was in accordance with the decisive vote of the citizens at the municipal election in December of the previous year, when, by a vote of 6,563 to 1,519 they had accepted the State law authorizing a commission to lay out public parks. The appointment of the members of the board was made by Mayor Grime April 14, 1902, with Richard H. Cook, Edward A. Doherty, Reuben C. Small, Jr., Charles R. Danielson and Matthew A. Mc-Clarence, commissioners for terms ranging from five years in the case of Mr. Cook to one year for Mr. McClarence. The work already done in grading, the construction of for interment; the small Oak Tree Cemetery adjoining, and Oak Grove Cemetery, for which 47 acres were purchased in 1855, and which has been enlarged by various purchases since that time.

There is one important natural curiosity—the rolling rock, on County street. This is a boulder of coarse conglomerate, though the ledge on which it rests is of granite, showing that it was brought here by diluvial action. It has a horizontal circumference of 58 feet, with a thickness of eight feet, and is of an estimated weight of 140 tons. It was so nicely balanced that until recent years, when it became blocked up, it could be moved perceptibly with one hand, and by using both hands the top could be made to oscillate two



South Park, View Showing the Effect of Shrubbery Grouping

playgrounds and walks and the planting of shrubbery has won general commendation, as well as a sense of indebtedness to R. E. Small, Jr., and Edward A. Doherty, the first chairman and secretary of the board, respectively, who were untiring in their efforts to make the parks worthy of the city. Mr. Doherty resigned on his appointment as an assessor in 1903, and was succeeded by Thomas J. Madden. Howard Lothrop, who had been resident engineer, has been superintendent since 1904,

The three cemeteries that come under the control of the Park Commission and which are being gradually improved, are the North Burial Ground on North Main street, purchased in 1825, and long the principal place

or three inches. In old bounds the rock is referred to as "The Goose-nesting Rock."

The present City Hall, of Fall River granite, was erected in Market Square in 1845-46 at an expense of \$65,000, and was considered a model for its time. It had a town lockup in the basement, a market on the first floor and a large hall, with offices in front on the second. With the growth of the city more office accommodation was desired, and in 1872-73 it was entirely rebuilt, with the addition of a mansard roof, tower, clock, etc., at a cost of \$200,000. On March 19, 1886, the roof and interior were destroyed, leaving only the walls. It was at once reconstructed in its present form, at an expense of about \$300,000.

The public sewers January 1, 1906, amounted to 65.94 miles, nearly all of which had been built within a generation and in many cases at heavy cost on account of the granite ledges encountered. The first sewer here had been built in 1857, in Spring and Washington streets, and was, like most of the early sewers, intended primarily to carry off surface water, but so constructed that it was easily adapted to the present system. Another was built in Odd street in 1858, to take water from French's hill. The Central street sewer, to care for water from that street, followed in 1859, connecting with gutters instead of allowing the water to flow into docks, which the sand had been filling up. Culverts in Pleasant street, near Third, also for surface water, were built in 1860, and in 1864 various short sewers along the harbor front to carry water under the railroad tracks, which had then been extended to Newport. In the early 70's some sewers began to be constructed in more thickly populated sections, and in 1873 Phineas Ball, a civil engineer, was employed to prepare a system of sewerage, which was accepted and has been generally followed. The real beginning in sewer construction was made the following year, when 9,329 feet were built at a cost of \$70,352. Since then it has been pushed as rapidly as the city's finances allowed.



South Park, View of the Wading Pool, looking North