

# PATERSON,

NEW JERSEY.

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Its Advantages for Manufacturing and Residence:  
its Industries, Prominent Men, Banks,  
Schools, Churches, etc.

BY CHARLES A. SHRINER.



PUBLISHED UNDER THE AUSPICES OF THE BOARD OF TRADE.

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L. O. Dup.  
Order Div.

whose descendants the land remained until about sixty years ago, when it was mostly sold in large parcels, to investors, who caused it to be mapped out into lots, which were sold by these maps during the ensuing thirty or forty years.

Another fact that simplifies the searching of titles in Paterson is the custom that has been followed during the past twenty-five years of organizing land companies to buy up extensive tracts and improve them. The titles of these companies have been so frequently scrutinized that it is seldom thought worth while to go back of them.

There exist to this day fences marking boundary lines in

the city of Paterson that were established so long ago as 1714. Within ten years an extensive farm, known as the Van Houten tract, lying on Broadway and adjacent streets, has been put on the market and sold off in building lots, on which have been erected dwellings costing in the aggregate between five and ten million dollars, and yet until within ten years no deed has ever been given for this property, it having passed by descent or devise during a period of two centuries.

The facts given above show that it is an easy matter for any intending purchaser to satisfy himself regarding land titles in Paterson, Passaic and Acquackanonk.

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# Paterson's Water Supply.

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BEING A HISTORICAL SKETCH OF THE PASSAIC WATER COMPANY.

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By Mr. JOHN J. BROWN, President of the First National Bank.

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THE first record in the books of the Passaic Water Company is the following:—

PATERSON, N. J., Feb. 11, 1854.

A meeting of the Commissioners of the Passaic Water Company was held this evening, when it was agreed unanimously that the following notice be given in the Paterson Guardian and Paterson Intelligencer:—

NOTICE.

The books for the subscription of the capital stock of the "Passaic Water Company" will be open at the office of C. S. Van Wagoner on Tuesday 7th, Wednesday 8th and Thursday the 9th days of March, 1854, from 10 o'clock, A. M., until 5 o'clock P. M., each day.

Signed,

T. D. HOXSEY,  
JOHN J. BROWN,  
C. S. VAN WAGONER,  
JOHN DREW,  
SAMUEL SMITH.

PATERSON, Feb. 14, 1854.

At a subsequent meeting of the Commissioners held March 4th, an organization was made by the choice of Mr. Van Wagoner as President of the Commission, Mr. Drew as Secretary and Mr. Brown as Treasurer. It was ordered that when subscriptions were made to the capital stock on the opening of the books, that ten per cent. should be paid; namely one per cent. in cash and nine per cent. in checks, which should be approved by the treasurer. Pursuant to the notice, the books for subscription were

opened on the days named. It is possible that if this occurrence had taken place in this year of grace 1850, there might have been, even in Paterson, a desire to push on an enterprise of so great moment, as the introduction of pure water. But at this early date, only few took interest in it, and the full amount of the subscription to the capital stock was only completed by Mr. John Ryle, who had already subscribed for the largest part, filling up the amount needed, by subscribing for the balance. This was done at the last hour of the last day, before closing the books.

The original subscribers to the stock were as follows:

John Ryle, R. L. Colt, Thomas D. Hoxsey, John J. Brown, Andrew Derrom, Thomas Thorp, William Ryle, Jr., C. S. Van Wagoner, Peter Ryle.

The amount of the capital stock thus subscribed for was \$100,000. On the 11th of March notice was given by the commissioners, in the papers before named, that the stockholders would meet for organization. This meeting took place on the 30th of March and resulted in the election of the following, as a Board of Directors:

John Ryle, Roswell L. Colt, Cornelius S. Van Wagoner, Thos. D. Hoxsey, John J. Brown, Peter Ryle, Thomas Thorp.

On the 13th day of April, the first meeting of the Board of Directors was held. At this meeting Thomas D. Hoxsey was elected president, William Ryle, Jr., treasurer, and Thomas Thorp, secretary, all for one year. It may be mentioned here that Mr. William Ryle, Jr., was the late Mr. Ryle, so well known as a large manufacturer and importer of silk, and not the present Superintendent of the Company, who bears the same name. At this meeting also, it was resolved that John Ryle, C. S. Van Wagoner and Thomas D. Hoxsey should visit and inspect the water works at Buffalo, Cincinnati and Philadelphia at the expense of the company.

Thus was started into being a company almost without friends; quite without money, with an utter lack of experience; with a very inadequate conception of what a water supply to a city meant; with everything to learn and at a period when only the larger cities had introduced water. As may be imagined, an enterprise like this, requiring so to speak a giant's strength with only the power of a child could only be attended by a world of care, anxiety and trouble, and could only be accomplished after many mistakes. As has been mentioned, the force of circumstances compelled Mr. Ryle to take a larger part of the capital stock of the company, than even his very liberal ideas and hopeful disposition had prompted him to do. This became a source both of weakness and strength to the company. The position of Mr. Ryle was one of power by reason of his having large rights to the waters of the Passaic river, derived from agreements with the Society U. M. He also had pumping facilities at the "Gun Mill" and had control of the waters of the lower basin below the falls. This gave him the power of being greatly useful to the company which now his large ownership of the capital stock made him, of course, willing to be. On the other hand the large subscription which he made involved large cash payments, too large indeed, to come from one pocket. It may be borne in mind, by the older readers of this sketch, that dollars in those days meant a good deal more than they do now. Paterson had then no reservoirs of capital such as national and saving banks to go to, and neither real estate, nor silk machinery nor even silk itself, such little as was here at that time, could build water works. Hence the early records of the Water Company show a series of trials, delays, makeshifts and disappointments from this lack of cash means. Some of these were foreseen and inevitable, some as may be supposed, came unbidden, but all alike were unwelcome.

As an illustration of the value of the dollar of that day, and also of what we in this extravagant age might call a grim joke, the following resolution was passed at a meeting which provided for the election of directors for the second year:

*Resolved*, That Thos. D. Hoxsey be paid the sum of one hundred dollars for his services as President for the past year, and that the Secretary and the Treasurer be each paid ten dollars for the same term."

From the very first, and it may be added here, to the very last Mr. Ryle took an intense interest in the Water Company. This did not grow alone out of his large holdings of capital stock, nor out of his connection with the interest he had in the valuable water privileges before named. His mind was a broad one, and took in large interest aside from that of gain, so that in the development of this great boon to the city of Paterson, his money interest in the Company compelled him to go on, but it was subordinate to his public spirit and desire for the public good which constantly led the advance. His intimate friends know quite well, that a good deal of his life was spent in what he, in his sometimes use of the Yorkshire dialect called "worreting" over his business troubles. He lived to see the promised land of the great success of his cherished scheme. He scarcely more than entered it, but he doubtless felt that he could leave to his children some of the results of the care, anxiety and trials of a generation of years. He was able in the later years of his life, in referring to the terrible disaster which swept away his fortune by the burning of the "Murray Mill," to say "I was ruined by fire, I was saved by water."

#### FIRST SUPPLY AND POWER.

To go back in our history; Mr. Ryle had before this time acquired possession of a part of the Falls property now owned by the Water Company. He had constructed the reservoir now known as the "lower reservoir," then, however, quite small in extent; and he had at the "Gun Mill" a surplus of power beyond the needs of the mill. He proposed to the Company, for a certain sum per annum, to supply them with water from his reservoir, the water to be forced into the reservoir by his power from below. This was all in anticipation of the mains to be laid by the Company. This inadequate and costly scheme for lifting water to that altitude, with all the risks of piping so rapid a stream as the Passaic often is, so near the falls, was after considerable negotiations adopted; and this first supply, and for several years after the only supply, was by this crude and make-shift method of sending the very water back, which had just tumbled over the falls, and which again came back through reservoir and mains to the streets below. So great a mistake must be attributed to inexperience, to lack of means for a more perfect way, and perhaps charitably, as one of the same kind of mistakes which nearly always attend new enterprises.

#### LAYING MAINS.

In the autumn of 1855 various cities and towns were visited to ascertain the relative value of the so called cement pipes. Full reports were made on the subject, especially by General Hoxsey, the President, and in June, 1856, the directors voted to adopt the cement pipes for street mains. The sizes for the various streets were determined upon and a contract was entered into with The Patent Water and Gas Pipe Co., of Jersey City for a quantity of the pipes and the laying of the same. It is worthy of record, that the first contract made with that Company contemplated the

laying of over fifty thousand feet of mains, or over ten miles. The contract for trenching was given to Thos. A. Quin, a contractor then living in this city.

#### ISSUE OF BONDS.

It need scarcely be said after mentioning the inadequate means with which the Company was launched into being, that money would have to be borrowed sooner or later; and so it was; only it was "sooner" and not "later." At this early time, with large expenditures before them, and the expectation of revenue only in the future, it need not be wondered at that the contract with the Pipe Company contemplated the payment of a part of the work in bonds. These bonds were accepted by the Pipe Company, and thus was issued the first of a class of securities which have become nearly as familiar to the investors of Paterson as the municipal bonds of the city itself. These bonds were not for a large amount and of course have been long since paid. There have been some days since that time, which might well be called dark days for the Company; some days when it was difficult to raise all the money that was needed for their many wants, but never from that early day of small things to the present has there been a day when the bond-holder waited for the payment of his interest coupon.

#### CONTRACT WITH THE CITY.

As might have been expected, the company made early application to the City Council for a contract for the use of hydrants for fire protection. As is often the case in matters of this kind, the company were met by many delays and questions, though not quite by refusals. Still the questions would arise as to the pressure, the quantity, the capacity of the pipes, the strength of the pipes; and then above all, the compensation. Without settling these questions the company went on steadily with the work. The mains were laid, and from lack of better directions, the hydrants placed where it was thought they would do the most good. Before the final agreement and while still the mains were only partly laid and the city partly supplied, a fire took place at the corner of Main and Van Houten streets, where the Continental Hall building was afterward erected. The prevention of a large conflagration by means of the new hydrants was so clearly demonstrated that most of the questions were answered at once, and they being removed, satisfactory agreement was arrived at. Since that time there have been several contracts made between the two corporations, for the supply of hydrants and other public uses, always it is believed to mutual satisfaction.

#### QUIET PROGRESS.

In the beginning of 1857 the Company purchased from Mr. Ryle so much of the falls property as was then deemed necessary for their use. This was the first purchase of real estate which in later days has assumed large proportions. About this time the Company engaged an office for themselves. Hitherto they had used the treasurer's office. As a commentary on those early times and limited ideas which were the rule, it may be named that it

was voted "to lease the rooms above Burnett's book store, lately used by the City Council, for five years, at eighty dollars per annum." These rooms be it known had been previously occupied by the city as a Council Chamber at sixty dollars per annum. "Great Scott!" some one exclaims, "the Paterson City Hall at sixty dollars a year." Bear in mind, gentle reader, that this was in the year of grace 1857, when city officials furnished their own offices and their own furniture.

During this and the succeeding year the services of General Hoxsey as President were deemed so efficient and valuable that his salary was fixed at \$200 per annum, and the sum of \$500 was voted to him as extra compensation for services as engineer and counsel for the Company; \$50 per annum was likewise deemed the proper figure for the salary of the secretary. During this and the following year the mains were laid and water was supplied to what was then called the North Ward. This was by means of a pipe laid on the stone piers under the flooring of the county bridge, permission having been previously obtained from the Board of Frecholders.

#### CHANGE OF POWER.

The years of 1858-59 and '60 were years of gradual increase in the users of water; increase in expenses and a continuous demand for more money. These years also developed the utter inadequacy of the means for supplying the reservoir to meet the increased demand for water. Various changes were suggested from time to time, but not until 1861 was a determination arrived at, to make a radical change in the method of pumping.

The credit of this great change should be awarded to General Hoxsey. It was that the power at the Great Falls should be utilized for pumping, while at the same time the water of the river above the Falls should be used for supplying the reservoir instead of taking it from the basin below. This common sense idea, and one very easy to see the merit of, after it was done, was a longer time in being accomplished than would now be imagined. What any one can now see how to do was then supposed to be too large a work for the then feeble Company. Columbus and the egg over again. Still it was done. A committee consisting of the president, the treasurer and Mr. Andrew Derrom were empowered to examine methods, consult competent engineers and report as to the practicability and cost. The outcome of this was in the autumn of this year, Mr. Emil Geylene, an engineer of Philadelphia, was contracted with to execute the work, he being furnished with a turbine wheel from Dayton, Ohio; rock excavation and mason work by Paterson quarrymen and the promise of means of payment by the treasurer, the whole work being under the superintendence of General Hoxsey. This method of using a part of Passaic Falls still goes on. There has been need of enlargement certainly; the turbine of that day has given place to a larger one, the excavation in the rock has been made deeper so that more power could be obtained, but the plans of General Hoxsey for the method and his promise of the results was a marked suc-

cess, and now remains fastened in the rocks as a monument of his sagacity.

#### SECOND RESERVOIR.

The latter end of the year brings the first mention of the need of a second reservoir. There was however, no further action on it until early in the following year, when Messrs. Hoxsey, Brown and Derrom were appointed to interview the city authorities with a proposal for the extension of the present contract for the supply of hydrants. This was as a preliminary consideration to aid the Company before undertaking so large an expenditure of money. Notwithstanding the urgent need of meeting the reasonable demands for a better supply of water, various causes prevented action, and like many other corporations before, and as many no doubt, will do hereafter, much talk and little performance was the order of the day; so that three or four years elapsed before the second, now called the middle reservoir, was built.

#### A DISASTER.

In the winter of 1867 an unexpected and terrific disaster befel the Company. It may be stated that the entire water supply of the city at this time, came through a large main, laid on a bridge built for that purpose crossing the river from the Valley of the Rocks to the "Gun Mill" yard. During a heavy freshet, either by the power of the current, or by the heavy masses of ice which came with the torrent of water, the bridge was carried away and of course the pipes with it. This left the city entirely without water. It needs no words to tell what this meant. Fortunately the Paterson Gas Company had at that time quite a stock of large iron pipe on hand. This gave a chance to repair, with little loss of time, what promised to be one of the great disasters to the city. Again Gen. Hoxsey's energy and prompt action helped to lessen the duration of the calamity. New pipes were connected with the broken pipes leading from the reservoir and were laid with great rapidity on the surface of the ground (no time being taken for excavation) along the Valley of the Rocks to the bridge then standing, called the "Ryle bridge," crossing the bridge and into the Gun Mill yard, where they were attached to the pipes on the south side of the river, thus restoring the connection between the reservoir and the city. Many will remember the odd appearance of this new kind of supply pipes, lying as they did, like an enormous serpent on the highway. They will remember too, the feeling of relief when the work was accomplished. The Company provided for a night patrol during the interval between the break and the repair. It may be named here that when the permanent repair was made, the pipes were anchored in the bed of the river; among the rocks where it is believed they are secure from both floods and ice. Mr. John Drew, then Superintendent of the Gas Company, rendered very efficient services on this occasion, and the Company tendered him a present of \$250 for this service. Mr. Drew having signified a preference for a

watch as a testimonial, his wish was met by the presentation of a watch and chain costing the same sum.

#### THE NEW RESERVOIR.

In the spring of 1867 the project for the long talked of new reservoir began to materialize. The land now occupied by the middle reservoir was selected by the directors subject to the approval of Theodore Weston, a capable civil engineer. Mr. A. A. Fonda was engaged as the Company's Engineer, and a committee appointed to purchase the needed land. During the months of May and June surveys were made; the property was purchased; the plans were approved and a contract for building the reservoir was made. This contract was awarded to Mr. Thomas F. Hoxsey. Nearly a generation who have grown up, so to speak, around it, can attest its stability and usefulness. Few only remember the rough gorge which was once the site of this reservoir.

As this is the first mention of Mr. Fonda as being engaged an engineer for the Water Company it is a good place to state, that as long as he lived, he was the valued and skillful employee of the Company; prompt in doing all that was required of him, and, so far as the writer can say, never made a mistake to the injury of the Company. His death was a serious loss to the Company, as well as to a large circle of friends as well as to the community, for his place was one hard to fill.

At the election this year Mr. Hoxsey retired from the presidency after thirteen years of faithful service. Mr. John Ryle was chosen in his place and was re-elected from time to time until his death in 1887.

#### CONTROVERSY WITH THE SOCIETY U. M.

In the year 1858, a controversy arose between the Water Company and the Society U. M. as to the use of the water at the falls. As might be supposed, where such valuable rights were involved, the controversy was severe, but the difficulty was kept out of the courts by mutual concessions. The settlement at that time covered several very important points, among which was making the well known openings in the west side of the Society's dam, which were to be for the use of the Water Company, and which are still used. Until quite recently, when a full agreement was made for the use of water, which may be named hereafter, there was a continuous disagreement over the use of water by the Company; the Society claiming that water was used beyond what the agreement warranted. This is now probably settled for all time.

By 1870 it had become very evident that the pumping power was inadequate for the supply of the reservoirs, now two in number, to meet the increasing demand for water.

#### A NIGHT TO BE REMEMBERED.

The principal design of this sketch is to give a plain but reasonably full history of the rise and progress of the Water Company, and therefore little else than a simple statement of the facts necessary for a proper understanding of it has been deemed necessary. A little departure from

this method, may, however, be permitted, so far as to give an account of an occurrence, which had in it the elements of expectation, fear, joy, relief, etc., combined

The occasion was the trial point of the success or failure of these new pumps. They were untried; large, they were called then; made by new men so far as such construction went; and the results of the trial were of that painful interest which can only be imagined when one can think of a whole community being deprived of water. Of course every preparation was made to shorten the time which must elapse between the cutting off the old system and the connection with the new.

The pumps and their connections were completed as far as was possible before this severance was made. A Sunday was chosen for the time as the day when the least water was needed. The reservoirs were filled to the brim. Then all means for pumping was cut off, and the city had only the supply already in the reservoirs to rely upon, with the narrow margin of the success of the new pumps, and the time it might take to complete the connection. As may be surmised, no time was lost. As many as could work in the narrow limits of the wheel pit, quite below the surface of the surrounding water, were laboring in the dim light of the oil lamps, but they worked with a will. Instead of the work being completed by the close of the day as was anticipated the hours of the early night came, and then midnight came still finding some of the work incomplete. Never it seemed were bolts so hard to fasten; never screws so difficult to work. Meanwhile the reservoir had gone down at the close of the day, and the interested watchers welcomed the night, if it was only that the water would then cease being used. Still the water went down; and so to speak, the fear went up as to what would be done in case of fire for that part of the town then without water. Midnight came and it could only be a few minutes before the last bolt would be in place. The anxious faces were pitiful to look at. The builders were there, care worn but reliant. Mr. Ryle had left the ground, sore hearted that there was any failure to keep up the supply; for the full moon looked down that night on a reservoir lined with mud; there seemed not a gallon left. Mr. Fonda the engineer, Mr. Brown the treasurer, Mr. J. C. Ryle the secretary, General Hoxsey, "Andrew" Edwards (still with the company) and "Rome" (Romulus Vreeland) pump tender, were with a few others the anxious but hopeful watchers. The word came that the water could be turned on: the turbine wheel speed on its way, and soon the great arms of the pumps began to move slowly but steadily; but they told that the work was done. The watchers hastened to the reservoir to watch the coming stream. It flashed out in the moonlight, and a large part of Paterson was saved from a water famine by a narrow margin indeed. The relief was intense, and one incident of the "let up" may be named. While waiting for the water to be forced through the inlet pipe, General Hoxsey picked up a bucket which stood at hand, ran to

the mouth of the pipe, caught the first flow of water and scattered it on the bystanders.

A dim, misty tradition belongs to that night and the two following days; but as there is no record of it in the books, it may be deemed as untrue. It is that there was a very open house kept by "mine host" at the falls, and that all were made welcome to eating and drinking as they pleased to come, and it is said too, that a good many came.

#### LARGE PURCHASES.

In 1871 the purchase of the Oldham's property was made, taking in the mills, machinery and lake connected therewith. This was done mainly for the possibilities for storage of water in the lake and its surroundings.

No efforts for utilizing this property as to a water supply have been made up to this time, and the only benefits to the Company have been from the buildings, the water power and the control of the lake with the ice which is formed thereon.

The following year the Company made the largest of their purchases. This was the whole tract, comprising the Falls property not already acquired, and taking in the property where the "Totowa reservoir" now stands, and all the lands between Totowa avenue and the river. This purchase was \$270,000.

In 1872 and 1873 Totowa was supplied with water. This could only be done by building a reservoir high enough to serve this elevated part of the city. No less than five miles of mains were required for this supply.

#### COMPLAINTS AND CRITICISMS.

At times during these later years some complaints were heard as to an inadequate supply of water. It was questioned whether there was a proper head, or that the mains were not too small. These comments were developed, or rather intensified by reason of a lack of water for the steamers at two fires, which occurred, perhaps in 1874. Fear was expressed by both people and press that there was a lurking danger to the city by reason of some deficiency growing out of either of the above named causes, or perhaps from both combined. The subject was taken up by the Board of Trade, who through a committee consisting of Messrs. John Cooke, Benjamin Buckley and William G. Scott, made a careful investigation. Their report stated "that there was no foundation for the unfavorable reports which had been circulated," that, "in their judgment there was an abundant supply to keep our steamers in full operation during the existence of any fire." The report goes on to say, "this opinion is based upon the following facts: that the two reservoirs which are in use, excluding the new Totowa reservoir, contain ten million gallons of water, while the pumping facilities are such that the supply in reservoirs can be replenished at the rate of six millions per twenty-four hours;" that "the six steam fire engines, when on fire duty, would be supplied for nearly three days steady pumping without any water being

supplied to the reservoirs, while the pumps are capable of supplying the reservoirs with twice as much water per hour as all the steamers can use in that time." The committee also gave statements as to mains and gates as well as to the method in which it is made possible "to divert the water from the usual courses, and the whole force of the reservoir be given to one or more sections as may be required." It is worthy of record here, that at this time, attention was called by the Board of Trade to a still greater subject, namely the interest which the large cities in northern New Jersey should take in preserving and utilizing the water supply for their own uses. The committee close their report with these words: "The subject of cooperating with Newark and Jersey City, in regard to a future supply of water for said cities" \* \* \* is of "such great importance and involving questions which require such careful investigation," that they ask to be relieved from considering it.

We of this day, know that these questions of "such great importance" were *not* duly investigated by any of the interested parties, and they are now compelled to treat with others for a supply; men of another state, who had the wit to conceive, the boldness to apply and the financial ability to take in hand so great a work are at this time, engaged in an enterprise which once could only be undertaken by a nation.

Notwithstanding the favorable report made by the Board of Trade, the Company proceeded to increase the pumping power, and placed a new pump in the Valley of the Rocks with necessary dam and wheel. This was an attempt to utilize the power which had already been used at the falls. This again going back to the old system of forcing the water from the lower basin to the reservoirs above, was so manifestly a waste of power, that it was soon abandoned for the better plan of using coal for power, rather than using water at so great a disadvantage.

#### FEARS OF A WATER FAMINE

The summer of 1875 was an extraordinarily dry one. This was the year when several of the large cities nearly prohibited the use of water, except for the most necessary purposes. The sprinkling of streets, the washing of wagons, the use of fountains and garden hose, with some other uses of water were restricted or prohibited. The Passaic Water Company were not compelled to resort to these measures, but they did doubtless trespass considerably upon the kindly feeling of the S. U. M. and probably overstepped the rights which had been accorded to the Company. At any rate, such a claim was made, and was finally liquidated at a heavy cost. Still the people of the city had the water, and that was satisfactory to them, whoever might suffer in purse for it. The year was a dry one as has been said. Some entertained the fear that the Passaic river was gradually falling away, and that the following year or years would be more trying than the present.

#### FRANKLIN LAKE.

This apprehension of a water famine, (possibly there were no other reasons) induced the then managing directors of the Company to look to the waters of Franklin Lake as a source of supply. A committee was appointed to investigate the subject. This committee made so favorable a report, that the Company agreed to buy from the "owners of Franklin Lake, and from the Franklin Lake Company" "all their rights and franchises." At the time this purchase was made there were also purchased all the rights of power and privileges of flooding lands on the river immediately below the Great Falls. Whatever may be the ultimate value of these costly grants and purchases, they have thus far been of no benefit to the Company; for in all the varied schemes for securing larger supplies of water, Franklin Lake has borne no part. Indeed so little account was made of these rights, to meet the ever growing demand for more water, that at a meeting of directors held Sept. 28, 1876, the following action was taken:

WHEREAS, in consequence of the unprecedented drouth during the past summer the Water Company has suffered much inconvenience from the short supply of water; and for the better providing of an ample supply in the future, and as a guarantee of a perfect and ample supply, on motion of W. Ryle seconded by Peter Ryle, therefore be it

*Resolved*, That the Company purchase a steam pump and boilers to be used as an auxiliary to their present pumps and machinery at the Passaic Falls, and that the steam pump shall not be less in capacity than one and a half million gallons in twenty-four hours; and that excavations be made at once for the placing of the steam pump and boilers, and that the same be enclosed in a suitable building; and that the President be authorized and is hereby empowered to make such purchases and improvements.

At this same meeting Mr. Edward Osborn was elected a director in place of General Hoxsey who had retired.

In pursuance of the decision for obtaining additional power at the Falls Mr. James Beggs was called in to propose plans and specifications. This did not occur until late in the autumn of 1877. The plans provided for a steam pump which would deliver 3,000,000 gallons every twenty-four hours. It is sufficient to say here that at a large expense the new power was put in and the building erected over it under the superintendence of Mr. Beggs, and for all the years since has proved an efficient auxiliary whenever it has been needed.

#### A CHANGE IN MANAGEMENT.

In April 1877 a very radical change was made in the management of the Company. The seats of all the directors except that of Mr. Ryle the president were vacated; their places were taken by men who had either as stockholders or bondholders acquired a large interest in the Company. These new men were the late William Ryle, who had in the early history of the Company been a director and officer; Mr. William A. Hadden, of Hadden & Co., N. Y., Mr. William H. Fogg, of the China and Japan Trading Co., also of N. Y. Hon. Seth Low was also

elected, but resigned before taking his seat in the Board. His place was filled by the election of the late John Shaw. Mr. Brown also resumed his seat in the Board, which he had some time before vacated. This change in the management was made necessary by reason of the financial embarrassments which the Company had gotten into by a too free use of its money and credit. The new Board proceeded at once to take measures for restoring the credit of the Company, and rescue it from the peril which faulty management had produced. It is not necessary to dwell in detail on this part of the history of the Company. It may almost go without saying that a Board of Directors such as were then in office, would be quite likely to bring order and success to a financial condition, when what was needed was only a right use of the great resources of the Company. This history would be quite imperfect did it fail to record that in this trying time for the Company, the late William Ryle, who as before named, came again into the direction, proved himself a tower of strength. His clear head and persistent efforts were of the most valued kind. He used his position as a director, as a large creditor of the Company, as intimately connected in business relations with other large creditors, and his own means as well in this effort to make the restoration of the credit of the Company a success. He had able helpers certainly in some of the other directors, and the First National Bank gave important aid to the efforts of the management. Still a true statement calls for a record that a large measure of the praise for the rescue of the Company from imminent peril, is due to the late William Ryle. This statement is permitted now that he has (with so many of those who were associated with him in this transaction) passed into the land where praises and blame are alike unheeded.

#### STILL MORE WATER.

The history of the Water Company, perhaps of all water works, private or public, shows a continuous demand for an additional supply of water. Hence, notwithstanding the additional power named above, only a few years intervened before the necessity for more water seemed as great as before. Indeed so great was the apparent need for a more plentiful supply that the Board of Trade again took the subject up and appointed a committee to make a careful investigation as to the efficiency of the Company in fully supplying the city. This committee consisting of Messrs. William Strange, Watts Cooke, William G. Scott and H. V. Butler, made a very full and elaborate report under date Dec. 28, 1880. This report may be found in the published records of the Board of Trade for 1880-1, and showed fully the condition of the Company, with its facilities for supplying the city. Their recommendations were of an important character, and were accompanied with the statement that some of the former promises made by the Company had not been fully carried out. A supplemental report made at the beginning of the next year, stated that the Water Company were aware of the growing needs of the city, that they had not been unmindful of the requirements, that a good deal had been done, but that

there had been an unlooked for increase in the consumption of water and that it was "admitted that more strenuous measures were now needed to insure the city against the possibility of a scarcity of supply in the future." The result of these inquiries and reports together with the knowledge on the part of the Company that the additions were required prompted immediate action, and the Company at once contracted with W. G. & J. Watson for a duplicate set of horizontal pumps the same as were already used. These were placed without loss of time. About this time the Company purchased and placed at the pumping works the large steam engine which had for a long time been lying unused at the Arkwright Mill, now Doherty & Wadsworth's. At this time was also built the high chimney at the pumping works.

These improvements were made after plans of Mr. James Beggs.

#### THE STONY ROAD RESERVOIR.

In the early part of 1884, the purchase was made of the property now known as the Stony Road reservoir. The directors of the Company had cast longing looks upon this property for many years. This site and the high lands then belonging to the late Mr. Heins, now part of the Laurel Grove Cemetery, were both selected as admirable sites for what was needed. The last named could have been obtained with little trouble, and was in many respects very suitable, but the other was so far superior in every respect, except that of size, that the Company hesitated to take anything but the best, and determined to bide their time in hopes that it might be purchasable. This occurred as before named, in the spring of 1884. Not for a year after this purchase was any work done in the construction of the reservoir. During the following year however the work of construction was put under way and was completed in the most perfect manner as is so well known to those who are experts in such works. To Mr. William Ryle the superintendent, and Mr. T. F. Hoxsey the contractor, great credit is due for the manner in which this noble work was executed.

#### A CHANGE OF OWNERSHIP.

In the year 1887 a great change took place in the ownership of the Water Company. Some change was also made, though not quite so radical, in the management of its affairs. The large money interests which had so long been held by Mr. John Ryle and to a lesser extent by the directors, resident in New York, had been parted with, with the consequent result of their places in the Board of Directors being made vacant. Messrs. Garret A. Hobart, Edward T. Bell, T. F. Hoxsey and William Ryle were elected in their places. Mr. John Ryle retained his place as president. These gentlemen still constitute the Board, with the exception that the death of Mr. Ryle, the president, made a vacancy in the Board which had not been filled and compelled the election of a new president.

This change in the ownership of the Company brought into its interest men of large minds and large means.



They had already, as has been before named, grasped the great idea of utilizing the waters of the Passaic river and its tributaries with the almost limitless possibilities for the storage of water for the cities of Northern New Jersey. Later on than the change thus referred to, the general public has through the newspaper press become aware of the purposes of this combination. It is no less, so the statements are, than that through the various corporations which are more or less under their control, to supply not only the cities of Northern New Jersey, "but for furnishing New York City and Brooklyn, when their demands shall exceed the quantity obtainable from their present sources." It is not a part of the history of the Water Company to make further references to this great enterprise; besides it is already published more fully than it can be here. It is sufficient to say, that the Passaic Water Company have made large and valuable contracts with the corporations controlling the waters of the Passaic, which give a guarantee for the future supply for many years to come, not only to this city, but to Passaic and Clifton likewise. These great advantages, were only obtainable at large cost, but all the same the benefit comes to the people, and generations to come will enjoy the great benefits, when the schemers and workers are quite forgotten.

#### CITY AND COMPANY.

Several times during the history of the Company propositions have been made looking to the acquirement of the works by the city. At times, there seemed to be a near consummation of it; but some opposition was developed that prevented it. Opinions have always varied as to the policy of the city becoming the owner of the works, and when the matter was referred to the people themselves, as was the case on more than one occasion, the decision was against the acquisition. It is probable therefore, that the present condition of things will continue, and that the city of Paterson and the adjacent city of Passaic will be supplied with water by the Passaic Water Company.

It is a matter of congratulation to all concerned, that there has been so good an understanding, so much of mutual forbearance and so little of irritation as there has been, between the two corporations so prominent, and so intimately connected with the welfare of the city, as are the city and the Company. Of course it is understood that their interests are mutual, but still, that does not always insure the absence of unpleasant attrition between large corporations. The relationship between the two are quite well understood, but it may not be out of place to say here, to the general reader, that the city is a large customer to the Company, paying for fire protection and sanitary purposes, while the Company makes large returns in taxes paid, and the willing devotement to the people of the city for their use and pleasure, more than twenty-five acres of park, river and Falls. This superb spot has no parallel in the State and has been made free to all.

#### CONCLUSION.

Little remains to be said. In this sketch there has been

a studious avoidance where it was possible, of any reference to the labors of those still living, and now connected with the Company. A slight departure may be permitted perhaps, so far as to name at least, Mr. William Ryle, the present superintendent. Much of the present efficiency of the present works, and nearly all of the watchful care during the later years, over the reservoirs, pipes, gates, engines, hydrants and the score of other things pertaining to the water supply of a city, may be credited to him. He has had the care growing out of the daily needs of the Company's work, and at midnight as well as at midday is wont to be summoned to meet the requirements of some unexpected and untoward mishap. This little allusion to him will not perhaps be gratifying to his modest estimate of himself, but he will first see it here, only with the general reader, and will have to endorse it as best he may.

#### IN MEMORIAM.

The late President of the Company, Mr. John Ryle, was it is well understood intimately connected with it, from the very first, but not for that alone, but because of his equally well known work in this city as a leader of men, a place is given here, to make a more enduring record, of the resolutions placed on the minutes of the Company on the occasion of his death.

#### EXTRACTS FROM MINUTES, NOV. 14TH, 1887.

"Mr. Hobart then stated that the object of the meeting was, that as the Hon. John Ryle, the President of the Company, had lately died in England, leaving not only a vacancy in the Board of Directors, but in the office of the President of the Company, it was fitting that some proper memorial or resolution be passed by this Board, expressive of their loss. And upon motion of Mr. Hobart, seconded by Mr. Bell, it was unanimously resolved that a committee of two persons consisting of John J. Brown and Edward T. Bell, be appointed to prepare and submit to the next meeting of this Board, suitable resolutions, expressing the sense of the Board of Directors at the loss this Company has sustained."

#### FROM MINUTES, NOV. 18TH, 1887.

"Mr. John J. Brown then proposed the following resolution: WHEREAS, the painful intelligence has reached us of the unexpected death of our esteemed Associate Director and President, John Ryle, at, or near his former home in England, it is eminently fitting that a tribute of respect should be paid to his memory by those with whom he has so long associated, and by whom his character and virtues are held in loving regard.

*Resolved*, That in the death of John Ryle this Company has been called upon to sustain the loss of one who as a director of the Company from its formation, now thirty-three years since, and its President for many years last past, has ever shown an interest and devotion in its success which could only come from the early and constant devotion to its welfare.

*Resolved*, That the Board of Directors as individuals and as a body, tender their sincere sympathy to his family, confident that they will find the consolation which may well be obtained, in looking back over a life so worthily lived.

*Resolved*, That the foregoing preamble and resolutions be recorded in the minutes of the Board of Directors; a copy of the same be transmitted to his family, and that they be published in the journals of the city.

Upon the unanimous adoption of the above, Mr. Bell then moved that the Directors of this Company attend the funeral of their late President as a body, which was also adopted."

THE END.

Except for a few statistical statements this history ends here. Not so, however, the work of the Company. This must go on; for every extension of the city brings other requirements. These have hitherto been fairly, perhaps not always quite in time, but still fairly met. The present managers desire to keep abreast with all demands made upon them as far as possible. As an illustration, it may be stated that the costs of last year's extensions alone amounted to \$39,106.00.

As may be supposed, the interests of the Company now require much supervision. The demands upon it are ever increasing. Its revenues and disbursements are second only to that of the city itself. It is quite well understood that the interests of the Company, unlike that of many corporations, are two sided, for the large obligation of supplying a people with water, both plenty and pure, is an ever present responsibility.

The following are some of the statistics of the Company :

Year.	Miles of Mains.	Hydrants.	Water Takers.	Revenue.
1860	14	100	400	\$9,100 00
1865	25	100	600	13,270 00
1870	30	320	1,470	45,319 00
1875	35	400	2,160	83,390 00
1880	40	475	2,630	97,600 00
1885	45	590	4,280	140,000 00
1889	55	790	6,275	197,000 00

  

CAPACITY OF RESERVOIRS.		PUMPING POWER.	
No. 1, Lower,	8 million galls.	Steam Pump,	4 mill. galls.
" 2, Middle,	12 "	Horizontal, St'm Eng.,	8 "
" 3, Totowa,	2 "	" Water Wh'l,	6 "
" 4, Stony R'd,	25 "		

OFFICERS AND DIRECTORS, 1890.

GARRET A. HOBART, President.                      JOHN J. BROWN, Treasurer.  
 JOHN C. RYLE, Secretary.                              WILLIAM RYLE, Superintendent.  
 EDWARD T. BELL,                      T. F. HOXSEY,                      ONE VACANCY.

# Horse Railroad Facilities.

It is extremely doubtful whether there is a city in the country in which more money has been spent on horse railroads than in Paterson. Horse railroads were built long before the erection of houses in various parts of the city justified any such expenditure of money. The principal object was in no case the accommodation of the people who had settled in Paterson but the development of various portions of the city and the accommodation of the people who would in the future settle there. There was no doubt as to the future of the city; there was no doubt as to the continued increase of population; there was no doubt that sometime in the future horse railroads would be a paying investment, but it took years to bring about the desired result. The histories of the horse railroad companies in Paterson are alike; heavy investments with limited capital, the issue of bonds, running the road for years at a loss and final failure tell the story of all. Some years ago Paterson had a number of horse railroads; now they have all been consolidated and are being run by one company; the population to make horse railroads pay has come and to-day horse railroad stock is considered a safe and desirable investment.

In 1868 the Paterson & Passaic Horse Railroad Company was chartered and tracks were laid from the Erie depot to Cedar Lawn cemetery, the capitalists interested in the new project being also interested in the development of Cedar Lawn and vicinity.

The late Franklin C. Beckwith built the road for the company of which he was also the president. The first spike was driven by Mr. John J. Brown, then mayor of the city; the second by Mr. Beckwith and the third by Mr. James Crooks, who had been instrumental in securing the charter and organizing the company. Owing to an inadequate capital the company issued bonds; the road was run at a loss for many years; no dividends were ever paid and the company succumbed in the panic of 1873. All who had invested lost their stock and even the second mortgage bonds were wiped out. Before this took place, however, the company had built a line through Willis street and Vreeland avenue to the cemetery; subsequently the Market street line was abandoned, and the tracks taken up, leaving Market street one of the finest drives in or about the city. In 1875 a line was built to Laké View through Market street and Trenton avenue but this was shortly af-