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Frederic Graff Jr. Scrapbook, 1854-1857**

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LOCAL AFFAIRS.

Water-Works—Fairmount.—Since our last annual statement of the operations of the different water-works in the city, the three works have been united and placed under the control of the Chief Engineer, Mr. Frederick Graff. This union was brought about through consolidation, and should either of the works fail to supply their consumers, an ample supply can be furnished from other parts of the city, immediately after information is given the Chief Engineer of the failure. The supply during the past year has been entirely satisfactory, except to a very few persons, who live on the higher grounds of the city, and those only suffered on Saturdays, or when there was an unusual demand for water, as was the case during the progress of the serious conflagrations which destroyed the Chinese Museum and National Theatre, Messrs. Cornelius, Baker & Co.'s factory, and the block of stores at the corner of Fifth and Chesnut streets. As we stated a year ago, the capacity of Fairmount Works were fully equal to the demand, and experience has exhibited the usefulness of the Jovial Turbine pump, and the necessity for the new reservoir, on Twenty-second and Parrish streets.

The following statement shows the quantity of ale gallons pumped during each month of 1853 and 1854:

Table with 4 columns: Month, 1853, 1854, Total. Rows for January through December.

Total, 2,274,459,230 2,286,409,222. The daily monthly average in the two years was as follows:

Table with 4 columns: Month, 1853, 1854, Total. Rows for January through December.

The daily average of 1853, was 6,231,395 ale gallons, and of 1854, 6,264,115—an increase of 32,720 ale gallons.

The quantity of pipe laid in the old city proper, during the year, was 3,372 feet, which added to the 463,383 feet laid previous to January 1st, 1854, gives the amount laid between Vine and South streets and the Delaware and Schuylkill rivers, 467,755 feet, or nearly 89 miles.

The 1st, 2d, 3d and 4th Wards of the city (late Southwark and Moyamensing,) are also supplied from the same works, so that the water passes through nearly 125 miles of pipe, varying in size from a half inch to thirty inches in diameter. Within the same specified limits, there are 633 fire plugs, and 222 hydrant pumps. In the four wards referred to, there were 356 fire plugs, up to Jan. 1st, 1854. Since that time a number have been made to the Chief Engineer, we cannot state the precise number. During the past year, 27 hydrant pumps were removed from the old city.

Schuylkill.—The enlargement of these works, which was spoken of a year ago in the Ledger, has progressed during the year, under the supervision of Mr. J. H. Fisher, late Register, and Mr. Graff, since his election. The work is yet incomplete, but, when finished, will greatly add to the capacity of the works, which continue to supply the citizens of the Eleventh, Twelfth, Thirteenth, Fourteenth, Fifteenth, Twentieth, and part of the Sixteenth Wards—the late districts of Northern Liberties, Spring Garden and Penn. The number of ale gallons pumped in 1853 and 1854 were as follows:

Table with 4 columns: Month, 1853, 1854, Total. Rows for January through December.

The daily monthly average for the two years was as follows:

Table with 4 columns: Month, 1853, 1854, Total. Rows for January through December.

Kensington.—The statistics of these works can only be given for the past year, in consequence of our failure to get any information about them for the year previous. As the books of the late district were kept entirely different from those of the Fairmount and Schuylkill works, we are only enabled to give the unworked quantity of water pumped and the daily monthly average:

Table with 4 columns: Month, Amt. Pumped, Av. consump. Rows for January through December.

From the above it will be seen that the total number of gallons supplied by all the works in 1854, was 4,270,596,902, and the daily average 11,700,237 gallons.

Table with 3 columns: Quantity Pumped, Av daily Consump'n. Rows for Fairmount Works, Schuylkill, Kensington.

The average of all the works in July last was: Fairmount, 8,458,502; Schuylkill, 4,792,055; Kensington, 2,472,610.

The revenue to be derived from the three works in 1855 will be \$330,509 42, divided as follows:

Table with 2 columns: Work, Revenue. Rows for Fairmount, Schuylkill, Kensington.

This shows an increase over the revenue of 1854, from Fairmount Works, of \$10,391 17, and \$6,724 33 from the Schuylkill. The increase from Kensington is not stated, but it is probable it will be nearly \$5,000, making the increased revenue upwards of \$23,000.

In the entire city there are upwards of 60,000 water takers. The water rents from these are payable at Fifth and Chesnut streets, in the office formerly occupied by the City Treasurer, after the 8th inst. All those who neglect to pay their water rents until the 1st of April, will, at that time, be charged 5 per cent. additional, and all rents unpaid after the 1st of July will be charged 15 per cent. additional, and the owners and occupants of the premises run a risk of having their attachments cut off.

The entire water department is now under the control of Mr. Fred. Graff. Mr. Geo. W. McMahon continues as Register, and besides these two efficient gentlemen the department is composed of 4 Water Purveyors, 2 Engine Men, 2 Engineers, 4 Water Inspectors, 2 Watchmen at Reservoir, 1 General Clerk, 3 Permit Clerks, and 1 Messenger.

Gas Works—City.—As these works have recently been made the subject of extended notices in the Ledger, on account of the successful commencement of the new works at Point Breeze, which have been erected under the immediate supervision of the Chief Engineer, Mr. John C. Cresson, and the improvement made in manufacturing wood gas, by Dr. Charles M. Cresson, as well as the improved retort for making wood gas, we will only give at this time, the operations for the past year. The consumption of gas in 1854, was 27,225,000 cubic feet greater than in 1853, as will be seen from the following statement:

Table with 4 columns: Month, 1853, 1854, Total. Rows for January through December.

Total, 249,772,000 277,009,000

During the year 1854 there were 22,100 lights added, 91 public lamps planted; 932 services laid and metres set, and 2833 applications made for the introduction of gas. These figures, added to those previously published, make the number of actual consumers 13,893; number of burners in operation, 202,702; public lamps, 2,020; and 14,006 metres set.

The maximum consumption of gas in 24 hours was 1,364,000 cubic feet, and the minimum 390,000. The stock on hand is 950,000 cub. ft. Since the city works were first started the length of street mains laid in ten lower wards is upwards of 120 miles.

Spring Garden.—These works, which, previous to the passage of the Consolidation Act, were under the management and direction of two separate and distinct parties—the Superintendent, Mr. Abraham Myers, and the Register, Mr. W. P. Hamm, and the Committee of the late District of Spring Garden—have now been put in charge of the Superintendent solely. This result has proved more satisfactory to those engaged with the works, and of more interest to the citizens, for while it consolidates the financial with the operating department, we are assured a smaller quantity of gas is supplied to a much larger number of burners

than ever before since their construction. This is accounted for, in a great measure, by the Superintendent having the management of the laying of street mains.

The Spring Garden Gas Works were finished in the spring of 1851, and went into operation on the 1st day of April of the same year. From that period to January 1, 1853, 25,000,000 cubic feet were manufactured; in 1852, 40,000,000 cubic feet; in 1853, 50,250,000; and in 1854, 66,232,600 cubic feet. The consumption of the past six months has been as follows:

Table with 3 columns: Month, Consumption. Rows for July through December, and January 1 to June 30.

Total, 66,232,600

The maximum consumption in 24 hours was December 27, when 248,800 cubic feet was burned, and the minimum, July 7, when the consumption was only 75,900 cubic feet. The street main laid measured 44,376 feet, or upwards of 8 miles, making a total of 135,366 feet, or about 37 1/2 miles. Of the main laid in 1854, 4,500 feet was 20 inches in diameter—a part of the new distributing main ordered to be laid along Hamilton street to Broad, and which is now completed as far east as Seventeenth street, 2,348 six inch, 19,937 four inch, and 17,651 three inch. This makes upwards of 52 miles of pipe of all kinds laid since the works started, as follows:—4,500 feet 20 inch; 5,150 feet 12 inch; 1600 feet 10 inch; 11,950 feet 8 inch; 12,193 feet 6 inch; 67,442 feet 4 inch; 92,226 feet 3 inch. There is also about 3000 feet of small pipe to supply public lamps, and 76,000 feet of service pipe, making 273,966 feet.

The metres set in 1854, were 2 of 100 lights, 3 of 45, 1 of 30, 4 of 20, 20 of 10, 276 of 5, and 411 of 3, making 717 in all, or 4,770 since the works began, as follows:—9 of 100 lights; 1 of 65, 4 of 45, 5 of 30, 39 of 20, 117 of 10, 2,305 of 5, and 2,286 of 3.

The public lamps supplied number 700, and the consumers over 7,000. The cost of manufacturing gas at the Spring Garden Works in 1851, was \$1 87 per thousand cubic feet; in 1852, \$1 23; in 1853, \$1 72, and in 1854, \$1 80. The great difference between the cost of 1852 and 1854, was owing entirely to the difference in the price of the coals used.

Weather Statistics.—The following interesting statistics of the temperature for the year, as well as the amount of rain, are obtained through the courtesy of Dr. John Conrad, being compiled from the journal kept by him at the Pennsylvania Hospital.

The following table shows the highest and lowest and mean temperature of each month of 1854:—

Table with 6 columns: High, Low, Mean for each month (January to June).

The warmest day in the year was the 21st of July, when the lowest of the thermometer was 81 degrees and the lowest 98. The coldest day was the 20th of December, when the lowest was 6 degs., the highest 18 1/2.

The temperature of the Seasons, as deduced from observations for 29 years, is as follows:— Winter Months 33.19 Summer Months 73.36 Spring 51.87 Autumn 51.61

The mean temperature of the year was 54 1/2, being 1 1/2 degrees above the average. The mean temperature of the 29 preceding years was 53 1/2.

Amount of rain for each month of 1854:

Table with 4 columns: Month, Rain (inches). Rows for January through July.

Amount of rain for each year from 1838 to 1854:

Table with 4 columns: Year, Rain (inches). Rows for 1838 through 1846.

The average amount for these 17 years is 44.16 inches. The greatest amount, in 1841, 55.50 inches. The least amount, in 1843, 35.00 inches.

The greatest amount of rain which fell in any month was in July 1842, 11.80 inches. The least amount was in September 1846, 1.50 inch.

Knowing the Fireplugs.—The condition of the fireplugs has at least attracted the attention of the proper authorities, and, as was expected, the most of them have been found so frozen as to be almost useless in case of a fire. The frost has been found to extend four or five feet below the surface of the ground, and in some cases the melting of the ice formed in the plug has defied all the applications of warm water, and even a fire kindled around it, and the earth had to be dug from around them so as to effect a thaw. This was the case with one in front of the Custom-House, and others yet to be examined will probably be found in the same condition. It is evident that our fireplugs are not of the proper construction, and that the mere stuffing them with straw does not prevent the water freezing. Before another winter, our fireplugs should all be remodelled, so as to prevent the possibility of their freezing, as by the present system the supply of water is cut off when most needed, that is, at the instant a fire is discovered. The severity of this and a few preceding winters has brought to light many defects, not only in the fireplugs, but also in the hydrants and plumbing arrangements in dwellings. There is scarcely a family that has not been annoyed by the supply of water being cut off by their hydrants freezing up, or pipes leading into their houses, bursting from the effects of the cold. In many new houses, where the plumbing has been done by contract, the water pipes appear to have been purposely left exposed, so as to secure an annual job for the plumber, and repairing always proves to be more expensive than the original cost, besides all the inconvenience and damage to the house consequent upon ripping up of floors and digging pavements to get at the ruptured pipes.

Fires.—Yesterday morning, between one and two o'clock, a fire was discovered in the drying-house over the steam engine house attached to the factory of Arbuckle & Richards, on Marshall street, near Girard Avenue. The fire was confined to the room, although some damage was done by water to the lower story and a part of the machinery. How it originated was not known. The firemen were soon on the ground, and with the police, were energetic in extinguishing the flames. The loss was not great, and we believe very little. If any interruption will take place in the operations of the establishment. On Friday evening, about 10 o'clock, a stable at the corner of Moore and Oak streets, West Philadelphia, was consumed by fire—the work of an incendiary.

Construction, and will attract much attention.

Paving and Water Pipes.—A correspondent makes some suggestions with regard to the payment of the costs of paving and laying of water pipes in the city. He starts out by saying that, as the city is poor and much public improvement required, the owners of property should pay for the improvements within the section or square in which it is done. He further urges that the expenses of paving and laying pipe at the intersections of streets, which have been heretofore paid by the city, should be borne by the property owners where the improvement is made, in proportion to their interests. The additional expense of the intersections would in all instances but slightly increase the bills of property owners. The fact is, it has long been contended that the whole people should not be taxed for improvements made where they are not directly interested, as they really are when the expenses of paving and laying of pipe at intersections are charged against the public treasury. The city authorities would no doubt encourage the erection of new buildings in many sections during the ensuing season, by making some change in the law regulating this subject.

Receiver's Office.—We have been informed