Origins of the Modern Granville Water Works
1885 - 1886

By Robert J Sauer

At antique markets and shows in recent years, I have come across items related to Granville,1 the most recent of which is a 20-page pamphlet entitled First Annual Report of the Granville Water Works, dated 1886, actually printed in Granville by Downs and Kussmaul and bearing four impressions of an embossed seal which reads "Mayor of the Village of Granville, Ohio". Apparently, this copy once resided in the files of the Mayor of Granville. How it ever migrated into the possession of an antique dealer in Westerville is anyone's guess.2 The contents of this Report agree very well with the narratives describing the development of the water works as related by all three of the usual Granville references3 4 5 and may well be their ultimate source, although none of these authors cite this document by name in any kind of bibliographic reference.

The Report is fascinating to read first-hand, but, short of reproducing the whole document, passing on some of its flavor with brief synopses and quotations seemed worthwhile. The Report begins by summarizing the events of "early in January, 1885" when the discussion of the "defenceless [sic] condition of our village against fire" was precipitated by the "complete failure of the Granville Hydraulic Company,"6 the predecessor to a lasting water supply organization. However, a brief review of the preceding 30 years helps to broaden the context for the 1885 events.

The most complete picture of events that led up to the development of the 1885 Water Works is given by Bushnell, but is spread over several pages of his book. In 1854, in response to the need for a reliable water source that could be distributed within the Village, "The Granville Hydraulic Company" was formed and capitalized at $3000 (30 shares valued at $100 each). Under this company, pipes were laid from a "copious spring 2 miles west and north of town" along Lower Loudon and Worthington Roads to a...
Crayton Black, Secretary

spring 2 miles west and north of town along Lower Loudon and Worthington Roads to a reservoir on Sugar Loaf and distributed to the Village from there. However, the Hydraulic Company was apparently not profitable and, in 1860, was sold at sheriff's sale for $234, at which time it still had an indebtedness of $1275. The water works must have continued operation in some form from 1860 into 1874. In 1863, the Town Council became involved and ordered that "a large cistern [no location given] made as a reservoir for water in case of fire" be filled. Then, on July 24, 1874, Council appointed a Superintendent for the Water Works, which must have consisted of the residual assets of the Hydraulic Company, fixed water rates and accepted "charge of them [the assets] on certain unspecified conditions."

Returning then to 1885, one can imagine that a variably reliable but increasingly unreliable water supply over the intervening eleven years, as well as increasing pollution of shallow wells in the Village and worrisome health effects of contamination, would have led the Mayor to call another "meeting of the citizens of the village, in the Town Hall, for Friday evening, February 27, 1885, to consider means for a supply of water and protection against fire." At this meeting, a committee was appointed to "examine the springs in the vicinity of Granville" and determine where an adequate supply of water for both domestic use and fire protection might be available. The committee, which consisted of J.L. Gilpatrick, E. Sinnett, C.W. Bryant, J.H. Sample and R.S. Colwell, concluded, however, that the best source of water was likely to be found in "wells to be located on the first bottom lands along Raccoon Creek." In retrospect, the committee's conclusion that wells would provide the "reliability" of water supply desired appears very insightful, since all the previous Village experience with water supply was from springs. Perhaps the makeup of the committee, with two members being Denison professors, had something to do with that insight.

In addition, the committee's proposal included building of a reservoir with the capacity of 93,000 gallons to be located near Denison University, purchase of pumping machinery to raise the water to the reservoir and installation of four and six inch pipes in the Village streets to distribute the water from the reservoir. Acceptance of this Report led to the hiring of I. B. Potts, President of the Trustees of the Water Works of Columbus, Ohio, to plan and estimate the costs for building the recommended water works for Granville. Potts' estimate for the facilities came to $13,572.05 and the Village concluded that $15,000 represented a rational goal.

The rest of the year of 1885 must have been characterized by furious activity around the Village. Prior to Potts' employment, a committee consisting of Dr. E. Sinnett, Dr. A. Follett and Mayor J.H. Sample, was appointed to secure legislation needed to put building of the water works to a public vote. At this election, "Of the two hundred seventy votes cast, one hundred ninety two were in favor of Water Works." On April 17, 1885, an ordinance to construct the water works was approved, on April 21, an ordinance to issue bonds in the amount of $15,000 was passed and on May 5, 1885, the water works trustees, consisting of Gilpatrick, C.W. Black, Bryant and Charles Tight as Superintendent, were...
elected. On May 26, the bonds were sold to Robbins, Winegarner, Wing & Co., of Newark. The bonds were issued in $500 denominations, bearing interest at 6%.

Shortly thereafter, a test well was drilled on land newly purchased (the land amounted to two lots, purchased from L.B. Munson for $175, according to the detailed list of expenditures in the Report) for the pumping station and the water quality analyzed "by Prof. N.F. Merrill of the College." About the same time, Denison University Trustees granted the Village "a perpetual lease of ground for the reservoir and for right of way for water mains." Denison also provided another interesting service for the project through the University's surveying class, which "did the field work and furnished the notes from which the profiles of the streets were made, without cost to the corporation." Construction of the wells was begun on July 6 and completed on July 23, pipes were ready for water by September 2, the reservoir was ready by October 7 and the pump was started October 8! In November, the pipes were tested to a pressure of 175 pounds, but because of some leaks, tapping of the distribution lines for domestic service was delayed until December. When the leaks had been tested, the pressure "on all service pipes on a level with the Public Square" was measured at 85 pounds and the "Hose Company" demonstrated that the pressure was "sufficient to throw streams of water from the ground over the highest buildings in town." By April 1, 1886, the date of the Report, 56 "consumers" had attached to the water lines and additional customers were being added as rapidly as possible.

The Report lays out a fairly detailed breakdown of the costs of the project, the final total of which amounted to $15,421.66. None of the financial details are included in any of the three extant narratives. In their final comments, the Trustees seem apologetic for exceeding comparable portions of Mr. Potts' original

<table>
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<tr>
<th>SCHEDULE OF WATER RATES</th>
<th>Per Annum</th>
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<tr>
<td>Dwelling house, 6 persons or less</td>
<td>6.00</td>
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<tr>
<td>Each additional person</td>
<td>0.50</td>
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<tr>
<td>Bath tubs, public, each</td>
<td>6.00</td>
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<tr>
<td>Bath tubs, private, each</td>
<td>3.00</td>
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<tr>
<td>Churches, per annum</td>
<td>4.00</td>
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<td>Fountains, flowing not to exceed 3 hours per day, between</td>
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<td>the first of May and first of November</td>
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<td>1/16 inch orifice</td>
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<tr>
<td>5/16 inch orifice</td>
<td>45.00</td>
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<td>Filling private cisterns, per 1,000 gallons (no charge less</td>
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<td>than $1)</td>
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<tr>
<td>Sprinkling season</td>
<td>2.00</td>
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<tr>
<td>$1.00 per 1,000 square feet above 2,000 feet</td>
<td></td>
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<tr>
<td>Urinals</td>
<td>5.00</td>
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<td>Water closets, self-closing</td>
<td>5.00 to 25.00</td>
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cost estimate, but they conclude with the statement:

This comparison is not instituted with any purpose or intent to criticise [sic] the estimate furnished by Mr. Potts, in any respect. It is made to show that it has been the good fortune of the town to build for a given sum of money, better by three thousand dollars, than careful men, who are acquainted with the actual cost of material and labor in water works construction, dared to estimate.

The Report concludes by reprinting sections of the 1880 Revised Statutes of Ohio pertaining to the powers and duties of trustees and with a "Schedule of Water Rates," only a few of which are reproduced on page 3, to show how water consumption was monitored and taxed in the Granville of 1886.

It would be interesting to know just how the Village arrived at these costs and how they were assessed. Based on official water only rates (i.e., neglecting sewer service charges) that were in effect from November, 1999, into the year 2000, which shows water to cost about $2.85/1000 gallons, the 1886 rate of $0.25/1000 gallons (assuming the cost to fill a cistern is closest to "true" water cost) seemed quite expensive. In fact, I've gone through the exercise of inflating that 1886 cost at published rates over the intervening 115 years, and the present day equivalent cost turns out to be about $5.80/1000 gallons (which equates to an average annual inflation rate of about 2.8%) and the annual fee for the least expensive self-closing water closet (then $5.00) would be about $116! On the other hand, in 1886 one had only to pay to purchase the water; now we also pay to dispose of it after use! One final comment also seems appropriate: from the chronology laid out in the Report, it appears that the Village went from the "idea" to the "reality" of a functioning water works in approximately 320 days, give or take a few! That is an amazing perspective, especially given the manual labor required, what we suppose to have been the pace of life in 1885 and the fact that "modern" project management skills would not come about for the next 50 years or more! Perhaps "good management" was practiced before it was recognized as such!

Notes

1 One item, now in the possession of the Granville Historical Society, appears to be a ca. 1800 ledger which recorded commercial transactions in Granville, Massachusetts, Granby, Connecticut, and Granville, Ohio. A second item is a copy of *Elements of Chemistry* (Twenty Sixth Edition, Robinson, Pratt & Co., New York, 1838), by J. L. Comstock, M. D., which bears a book plate reading "Sold by A. P. Prichard, Granville, Ohio." Thus, though apparently not plentiful, Granville-related artifacts are still circulating in the central Ohio area and those of us interested in Granville history need to keep an eye out for them.
2 It will now be returned to Granville and reside in the Archives of the Historical Society.
6 King, *op. cit.*, p. 264. This "collapse" is referred to in a chronological listing, but King cites no original sources and Utter does not seem to refer to the Hydraulic Company's failure as a precipitating circumstance.
7 Bushnell, *op. cit.*, p. 171.
8 Bushnell, *op. cit.*, p. 179.
10 Bushnell, *op. cit.*, p. 187. Bushnell does not describe what the "certain conditions" consisted of and neither King nor Utter describe this interim Water Authority.
12 Sample is noted by Utter as the Mayor of Granville (*Utter, op. cit.*, p. 268), so this copy of the Report may well have belonged to him. Gilpatrick and Colwell are indicated by Utter to be Denison professors and King notes that Bryant died the next year at age 37. See editor's note on next page.
13 Utter notes that this was Professor Gilpatrick's surveying class; *Utter, op. cit.*, p. 269. King notes that Gilpatrick was a professor of mathematics.

On behalf of the Granville Historical Society, the editors wish to thank Robert Sauer for researching and writing this interesting article for The Historical Times. The Society is also very grateful to him for donating the pamphlet, *First Annual Report of the Granville Water Works* to the Society Archives.
The Men Who Laid the Water Pipes

Laura Evans, who is engaged in indexing The Granville Times for the Society, has called our attention to two short articles, both in the September 4, 1885 issue of the Times, which give us some insight on the construction of pipelines for the new Water Works. The initially wary response of many members of the community to an influx of laborers, many of them immigrants from Italy, was changed as they observed them at work and at rest.

"An open-air concert of no ordinary merit and magnitude was given by the Italian boys in front of their quarters Tuesday night. A large number of persons, young and old, male and female were present, sufficient to occupy all the standing room on the sidewalks and street. While the Italian were entertaining their audience in the early evening with songs, suddenly the Granville Cornet Band came upon the scene, with torches ablaze and playing one of their choice selections, and then the exercises were fully inaugurated. With responsive singing and playing by the Italians and the band, the audience were borne aloft to a high pitch of enjoyment until about 10 o'clock, when the band withdrew, the audience went to their homes, and the minstrels retired to their quarters. The band deserves a compliment for their fine playing and the splendid contribution to the enjoyment of the evening."

"The laying of pipes for the water works is completed, and the working force have gone to another field. We compliment the workmen that have been engaged in the work on their good behavior and strict attention to their legitimate business during their stay among us. That such a force of men should work together for such a length of time without any friction or quarreling or fighting is really remarkable, and deserves commendation. The Italian boys maintained a cheerful spirit and good humor, and seemed to be really happy, notwithstanding the fact that they were deprived of many things that we generally regard as essential to comfort. Think of men working ten hours a day in trenches and cooking their own meals with a very slender set of kitchen furniture, out of doors, over a fire between a few stones loosely laid together, and singing as they go, and you have an example of contentment that is, to say the least, remarkable."

Editor's note:
Charles Webster Bryant, who served as Treasurer of the Water Works and is pictured on page 2, was a prominent citizen of Granville. He and his partner, Crayton Black operated the local drug store. He was also the founder of the Granville Historical Society. It was a cruel irony that his death in September 1886, at the age of 37, was caused by typhoid fever.

Notice
Help us interpret Granville's history!
Spend a few hours showing the interesting exhibits in our Museum to visitors. Hours may be arranged. The docent group is organizing for the upcoming season.
Call for information about times for meetings and docent events.

587-3951 or 344-1291

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The editors are grateful for special assistance from
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This is the Fifteenth Year of Publication for The Historical Times
Send comments, suggestions, or queries to:
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The Oral History Project

Granville history will be given a voice - many voices, in fact - with the help of grants from the National Endowment for the Humanities (NEH) and the Ohio Humanities Council (OHC).

Dick Daly, president of the Granville Historical Society, announced that the Society has been awarded a $10,000 consultation grant for an oral history program that will tape-record recollections of community residents discussing the last 50 years. In a congratulatory letter to the Society from Nancy Rogers, Director of the Division of Public Programs for NEH, she wrote, "You can take pride in the fact that your organization is one of only 17 across the nation that were awarded NEH Consultation Grants this year." She added, "The Endowment judged your oral history project to be an excellent model for engaging community residents in understanding their place in history."

The Society has also been awarded an additional grant of $7,500 from the Ohio Humanities Council to assist in carrying out the procedures developed in the NEH project. It will help with the expense of conducting interviews, purchasing equipment for recording, and sharing the results with the public. Funds for transcribing the interviews, essential to completing the project, must still be raised.

The project, entitled "Oral History of Granville, Ohio: A Community Challenged by Change" will conduct interviews with residents of all ages, who will talk about Granville over the past 50 years and how its location on the fringe of a metropolitan area is changing the community. The grant application stated, "Granville has reached a critical time in its history and many of our citizens are questioning the future. Because Granville is a community in transition, we are seeking through oral interviews to document the traditions and customs of the past as they contrast with the experiences of residents today. Students, farmers, teachers, small business owners, residents who work in Columbus, active members of service clubs and longtime residents are representative of those who will be interviewed." Interviews are projected to take place from September 2001 through March 2002.

"The Society Board discovered a need for our project when we realized that we were losing a critical component of our history, first hand memories of life in Granville during the past 50 years," President Daly said. He added that Granville's approaching bicentennial celebration in 2005 was an impetus for undertaking the project, and emphasized that, "Because of the limited funding and volunteer nature of the Granville Historical Society, these grants are essential in carrying out this ambitious community project. We are grateful that the NEH and OHC rewarded our grant writing efforts."

A Historical Society committee composed of Daly and five Society members - Florence W. Hoffman, Marilyn Sundin, Sara Jean R. Wilhelm, Cynthia R. Cort and Charles A. Peterson - is coordinating the project. Lyn B. Boone, Denison University's director of alumni affairs, will direct the implementation of the OHC Grant.

The NEH grant will help defray the cost of services provided by several programming consultants. Principal consultant will be National Endowment for the Humanities Professor of Sociology and American Studies Howard L. Sacks of Kenyon College. Sacks is director of the Rural Life Center in Knox County and is recipient of over 30 grants and fellowships for scholarly research and public programs including four award-winning projects on regional life including
"The Community Within: Black Experience in Knox County." Professor Emerita of History Lorle Porter of Muskingum College will contribute her expertise for the interviewing process. She has conducted numerous oral history projects. Other consultants are Professor of History William Kerrigan, of Muskingum College, Professor Emeritus William Baker of Wright State University, Albert Albano, Executive Director of the Intermuseum Conservation Association in Oberlin, Ohio, and Susan Scott, Coordinator of Library Instruction at Denison University.

It is planned to finalize the consultation process and establish a project timetable by May 2001.

Granville Civil War and Military History Roundtable

Spring 2001 meetings.

Tuesday, January 16th: The Reverend William McFarland
Calvin Rice, curator of the Guernsey County Historical Museum, presenting a first person character portrayal of The Reverend William McFarland, chaplain of the 97th Ohio Volunteer Infantry for three years during the Civil War.

Tuesday, February 20th: They Didn't Like Each Other Much: Joseph E. Johnston and John C. Pemberton at Vicksburg
David Smith has given talks to a number of different roundtables discussing the stormy relationship between Confederate Generals Johnston and Pemberton. Copies of The Vicksburg Manuscript of General John C. Pemberton will be for sale at the meeting.

Tuesday, March 20th: Cassions and Limbers
Tom Hankins, who has given talks to the roundtable before on medical practices during the war, will be discussing how a field artillery caisson and limber were designed and constructed.

Tuesday, April 17th: The Battle of Fredericksburg
Harold Armstrong, who has given talks to the Sons of the American Revolution, will be discussing the Battle of Fredericksburg. He feels that this battle is one of the most understudied major battles of the war.

Tuesday, May 15th: Court of Inquiry of General Sherman
Chris Evans and Kevin Bennett, both of whom have made many presentations to the roundtable, will discuss and show a video that was made during the Court of Inquiry of General Sherman for war crimes this past year in Lancaster. Chris portrayed General Sherman during the event.

The meetings will be held at the Old Academy Building at Elm and South Main at 7:30 pm. If you have any questions or want to be involved in future presentations, please call: 522-5091 or e-mail mccaul.l@osu.edu

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<th>Board of Managers of the Granville Historical Society</th>
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<tr>
<td>President: Dick Daly</td>
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<td>Vice President: Margaret Brooks</td>
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<td>Secretary: Charles Peterson</td>
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<td>Robert Hill</td>
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<td>George Wales</td>
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The Granville Hydraulic Company: Granville's First Water System

Water played an important part in determining the site of Granville in 1805. Springs trickling from the hill, Raccoon Creek, and Clear Run, must have been decisive elements. Digging wells and cisterns could wait while homes and businesses were built.

By the 1830's the hazard of fire in the expanding village concerned the citizenry. Cisterns had been placed at strategic positions to supplement the privately owned wells and cisterns, and a cistern and the village pump were located on the north side of Broadway in the business district. As early as 1834 the village fathers had purchased a fire engine with hand pumps and leather buckets hanging along the side.

By 1850 the Village became more sophisticated as the pioneer period receded. Many home owners wanted water piped into their homes, and an additional supply of water in case of fire. So a group of prominent citizens; including Solomon Sanford, head of the Episcopal seminary, W. H. Kerr, of the Granville Female College, W. P. Pritchard, druggist, and Ralph Parsons, business man; formed the Granville Hydraulic Company to pipe water from the largest spring in the area, two miles northwest of the Village.

The spring was located on the Alvah Sanford farm, now owned by Robert Rutherford, descendant of one of the original settlers. Shares were sold for $100 each and a reservoir was built on the northeastern slope of Sugar Loaf hill, 30 feet lower than the spring.

A contractor was hired to lay the 2 "A mile line of stoneware pipe from the spring along the lower Loudon Street, now Alexandria Road, and on Worthington Road with its junction at Lower Louden to a point opposite the reservoir. It was then laid across Broadway to the reservoir, capable of holding 500 barrels of water. Smaller pipes were laid on each side of Broadway, to pipe water into the homes of the subscribers. Hydrants were placed on lawns, although occasionally the outlets were placed in cellars for additional fall.... Such a pipe exists in the basement of the Utter home South Pearl and Elm Streets.

The undertaking proved less successful than the founders hoped. Leakage and financial trouble plagued them. After a series of receiverships, the sheriff sold the whole system to Alvah Sanford for $234 and the assumption of a $1,275 debt. Clara Sanford eventually came into possession of the system and she willed it to the Episcopal Church, which rented it to the Village for $100 a year. William T. Utter commented that the last reference to the hydraulic system was in 1885, when it was superceded by the municipal water works. Disastrous leaks had made the system unusable and not worth repairing.

Excerpts from a column by Alma Lucas Utter in The Newark Advocate, August 28, 1973, noting the installation of a plaque marking the location of the 500 barrel storage reservoir at the foot of Sugar Loaf.

Elizur Abbott's Water bill for the second half of 1867.