The Colonie Historical Oracle

Quarterly Newsletter of the Historical Society of the Town of Colonie

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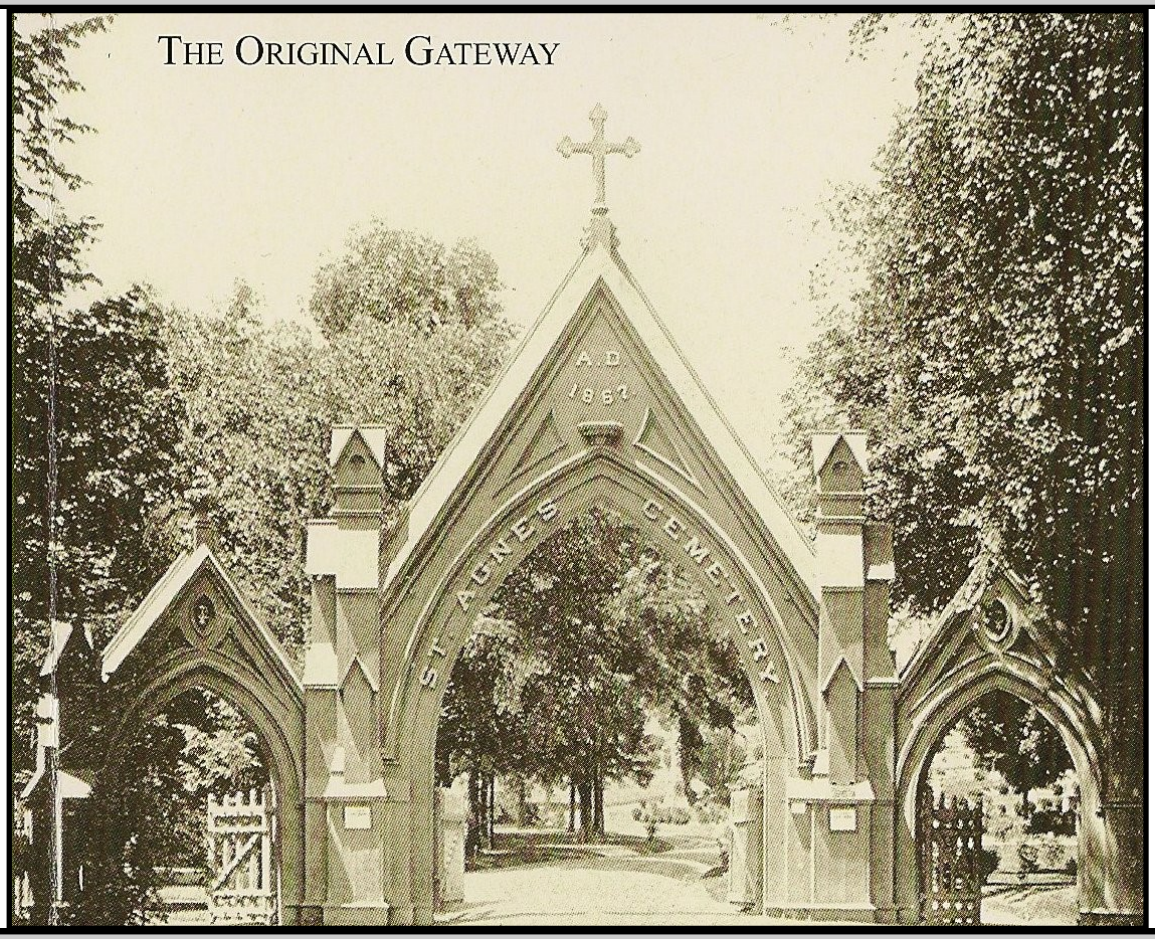
Toxicity of Sacred Ground

Submitted by Kelly Grimaldi, Associate Director, Albany Diocesan Cemeteries



The Original Gateway at the entrance to St. Agnes Cemetery in Menands

Black ink from a fountain pen, faded now to a burnt amber color, captures these poignant words spoken by Mr. John Farrell, Board of Trustees Secretary for St. Agnes Cemetery, Menands, New York and recorded in meeting minutes dated April 2, 1890:

"It is with a feeling of sorrow that reference is made to the death of Mr. John Kelly, a faithful undertaker employed in the cemetery during the past five years. On March 19, 1890 he finished his work in good health; going home he was seized with pneumonia and peacefully passed away."

John Kelly was only 40 years old when he died. By March 19, 1890, John had already dug 31 graves for the month; the last one was for a baby named Mary O'Toole. As fate would have it, his own untimely death from what was thought to be pneumonia would soon follow. Symptoms of bacterial pneumonia usually come on suddenly in people younger than 65 years. Among these symptoms are fever, cardiac arrhythmia, vomiting, respiratory infection, coughing, and weakness. These same symptoms are present in victims of acute arsenic poisoning as well. John Kelly's workplace was filled with bodies

embalmed with a chemical component that contained lethal levels of arsenic. That fact makes it possible on that fateful day in March of 1890, John Kelly was poisoned to death.

What really killed the undertaker? This question, and the possibility the answer could be exposure to a toxin in his workplace, poses a question in the broader context of how burial practices in Albany impacted the environment and public health. By examining the process of changing burial practices in the 19th century, we uncover some of the ironies associated with Albany's management of its dead and the truth about the toxicity of cemeteries.

Early Albany's church burial grounds and small family burial lots effectively managed the dead until the population of the city grew too large. New York census data puts the population of Albany in 1840 at 33,762 persons. In response to the rapid increase in the number of deceased persons, the City of Albany designated lands within city limits to serve as cemeteries. These municipal cemeteries solved the problem of what to do with its dead – but only in the short term. Municipal cemeteries were filling to capacity quickly prompting the formation of large rural cemeteries set far away from their urban counterparts. Albany Rural Cemetery opened in 1844 and its Catholic neighbor, St. Agnes Cemetery opened in 1868. Both cemeteries are beautiful examples of the rural cemetery movement and managed Albany's dead effectively. Bodies were removed from municipal cemeteries to these new burial grounds and the vacant cemetery grounds were rezoned. The new rural cemeteries were beautifully maintained and thought to be no threat to public health. Were they safe?

By 1880, the number of people living in the city nearly tripled to 90,758 people. St. Agnes cemetery alone was handling between 700 and 900 burials per year in the latter quarter of the 1800s. Since this large volume of burials occurred far enough away from the heart of Albany, public fears of bad air associated with decomposing bodies were quelled. "Fear" is the key word. Scientific evidence proving burials of human remains were detrimental to the health of the living is not defined in 19th century literature including Board of Health reports or in the annual reports of the Albany Medical Society. And yet cemeteries were feared. The fear factor must be examined for what it was – myth and suspicion versus knowledge. Bodies buried in city cemeteries before the 1860s were not embalmed and so they decayed naturally at a rapid rate and permeated the air with horrific stench. People constantly monitored and fretted over their vulnerability to ailments and the smell emanating from cemeteries was considered detrimental to human health. Without clearly defined evidence from a medical or scientific perspective, people had no basis for differentiating between nuisance effluvia and airborne pathogens. There was little in the way of successful treatments for illnesses and chronic diseases making avoidance of the things thought to be the causes very important. This fear was a motivating factor in the removal of bodies from the city burial grounds to rural cemeteries.

Welcome New Members!

The Historical Society of the Town of Colonie would like to welcome our newest members:

Barbara McCarthy and David Pratt

Welcome Aboard!

Laws shaping the formalization of the funeral industry which had been loosely established during the Civil War, became more solidified and standard after the war. Embalming human remains became an industry standard. Ironically, the newly regulated industry for the proper management of human remains negatively impacted the environment and public health in a manner that was unexpected. While Albany's rural cemeteries provided a beautiful space to bury its dead, changes in the way bodies were prepared for burial made these cemeteries more harmful to the environment and people than did bad smelling municipal cemeteries. At the forefront of this irony is the "art' of embalming to keep the body preserved and looking as though it is merely asleep. Arsenic, a main ingredient in embalming fluid, is extremely toxic – so toxic it was finally banned in 1911.

Bodies interred in Albany's municipal cemeteries were not embalmed as a rule because most of the burials occurred before the discovery of this preservation technique. The process of digging up and

removing naturally decomposed human remains from municipal cemeteries and moving them to rural cemeteries may have been a gruesome task but it was not detrimental to the health of the gravediggers. Disinterments occurring after embalming became a standard practice of the mortuary industry are a different story. It is a curious fact that final resting places, even in rural cemeteries, were not always final. Embalmed, toxic bodies were disinterred and re-interred by cemetery workers with regularity in the 19th and early 20th century. Typical disinterment requests were made by people of economic means who wished to remove family members to newly purchased family lots. The hazard to cemetery workers from a modern perspective is clear. Toxins in embalming fluids leaked out of burial containers that also contained lead and poisons in wood varnishes and paint.

Above photo:
Monument to William & Lucy Cassidy
located on Founder's Hill

The workers were not garbed in protective clothing and respirators had not been invented. They unwittingly exposed themselves to poisoning.

In St. Agnes Cemetery, workers dug graves by hand until the purchase of a backhoe in 1957. They were in close daily contact with soil and ground water contaminates not the least of which was arsenic. How much arsenic is enough to pose a health threat? The National Research Council's report dated 1999 summarized the effects of arsenic on drinking water to demonstrate its potential harm to the environment and people. According to the report, low levels of arsenic – a few micrograms per liter or less - are in most U.S. drinking water supplies. Ingestion of arsenic in doses of 70 to 180 mg cause symptoms of acute illness that include, but not limited to, fever, anorexia, cardiac arrhythmia, respiratory tract irritation, muscle weakness, kidney failure and eventual death. While we do not have proof cemetery caretakers and their families experienced health issues due to arsenic poisoning from embalmed bodies, we can make a hypothetical case for its possibility by investigating the length of time of employment, cause of death and age at the time of death.

Cemetery caretakers and their families were most vulnerable to health issues associated with these contaminants because they resided on cemetery grounds only a few yards from burials of embalmed bodies. Patents issued for embalming fluids circa 1873 contained arsenic from as little as four ounces to as much as 12 pounds of arsenic per body. Worst case scenario, if we consider the National Research Council's findings that an average of 2 micrograms of arsenic are found in one liter of drinking water and that between 70 and 180 milliliters will cause serious health problems and/or death, 12 pounds of arsenic per corpse means trillions of milliliters of arsenic leached into cemetery grounds over the decades. A study of the St. Agnes Cemetery's superintendent's report offered monthly to the Board of Trustees confirms the caretaker's house relied on well water until the house was torn down in the late 1980s. We know from various primary sources that the water table in Albany Rural Cemetery and St. Agnes Cemetery was (and still is in many places) extremely high which indicates the wells on the grounds would have been shallow and thus more easily contaminated.

There is no reference to the soil in rural cemeteries as being potentially toxic despite that by 1911, embalming fluid containing arsenic were banned because it was linked to the sickness and premature death of funeral directors. It is important to remember that arsenic is not only toxic, it is persistent. Elemental arsenic will never degrade into a harmless by- product. Based on that fact, we can infer early embalming practices were detrimental to the health of cemetery workers and had a negative impact on the environment and yet, Albany's rural cemeteries were ignored or dismissed by the Board of Public Health as being unsafe.

Improvements in health care, the mechanization of grave digging and caretakers residing off cemetery grounds after the 1950s appear to have lessened the impact on the health of these individuals. For example, in St. Agnes Cemetery, the lineage of caretakers is well documented as were their deaths and from this documentation we glean some stark facts about the fate of these men. It is not the intent of this paper to prove conclusively that their work environment caused chronic health problems and/or death. It only serves to pose the possibility that the toxicity of sacred ground did them harm or caused their death. The following accounts are noted in the Board of Trustee Minutes from 1888 – 1958 and in the interment records for St. Agnes Cemetery: Harry Wells was hired in 1958 as caretaker. He used a backhoe to dig graves unlike his predecessors who dug by hand into contaminated soil on a daily basis. He also did not live in the caretaker's house. Mr. Wells lived to age 79.

Among his less fortunate predecessors is Joseph G. Kelly who died of kidney failure at age 49 in 1956 having lived on the grounds for 9 years. Edward Nealon's last residence was the caretaker's house where he lived for less than one year before dying suddenly in April of 1938 of cardiac pectoris – his heart was not getting enough blood and oxygen. Thomas Farrelly was hired as Nealon's replacementin June of 1938 and offered free use of the caretaker's house. By September of 1940 he too was dead of a cardiac issue. Looking into the 19th century, we find Thomas Flattery, 28 years old, hired as an assistant to caretaker, Thomas Behan in 1888. Within months young Thomas was dead from a fever and Behan of inanition (an inability for the body to absorb nourishment).

In June of 1899, Thomas Burke rented the "lodge" house on cemetery grounds. Six months later his baby daughter died and then his wife of "pneumonia". Burke died of kidney failure one year later. He was 28 years old.

At least one young work horse used in the cemetery experienced health issues. Minutes of the December 1893 meeting of the Board of Trustees reference a horse called Agnes that faithfully performed her duties in St. Agnes Cemetery which included carting contaminated soil.

Within a short period of time, Agnes was sadly deemed unfit for driving because her breathing was difficult, and her strength gone. Agnes, like many of the caretakers, died prematurely.

Benjamin Judson was the most notable caretaker for St. Agnes Cemetery. Judson was also employed at Albany Rural Cemetery for several years before moving into the caretaker's house at St. Agnes. Judson was a leader in the National Convention of American Cemetery Superintendents and under his care, St. Agnes Cemetery became known internationally as one of the world's most beautiful cemeteries. An ironic notation is made in a The Albany Argus newspaper dated September 26, 1896: "What Mr. Judson does not know about cemeteries is not worth knowing." This trusted custodian for the dead did not consider his beautiful grounds could be toxic. Judson died in 1902 at age 49 of kidney failure. Is it a coincidence that cemetery caretakers died from complications that present in victims of arsenic exposure? With no regulatory monitoring of rural cemeteries by the Board of Public Health and no consideration by a lead figure in the National Association of Cemetery Superintendents that toxicity of the soil and ground water in cemeteries could pose a health hazard, it is no wonder the correlation between the demise of caretakers and their work environment was not made.

It was not until the 1970s when Congress enacted the Occupational Safety and Health Act and Toxic Substance Control Act that much attention was given to chronic illness or death associated with hazardous workplace environments. That is likely why the demise of cemetery caretakers did not command attention. Nobody was looking for a connection. Though arsenic was a known carcinogen capable of killing a person, the degree of exposure necessary to cause harm was not clear. The varying and often long periods of time it takes for diseases caused by occupational hazards to manifest themselves make it very hard to compile a statistical analysis that proves a direct cause and effect modality. That difficulty makes establishing and enforcing mandates for the protection of workers nearly impossible. A comprehensive statistical analysis linking digging graves to/ chronic health problems and/or acute poisoning would have been a moot point prior to the age of mechanization. Graves needed to be dug. Cemetery workers – in doing their job – likely dug their own graves in a manner of speaking.

Circa 1954, this image was taken from inside St. Agnes Cemetery looking toward the gateway entrance. Out of frame to the left was the Superintendent's House, once occupied by Benjamin Judson. The house has been replaced with the current modern office build-

How About It?

Want to Be Considered as a Trustee on the Board of the Historical Society of the Town of Colonie?

The Historical Society of the Town of Colonie (HSTC) is a volunteer organization focused on the History of the Town of Colonie. Members of the HSTC receive our quarterly newsletter and can attend the historical presentations we organize for the Capital District community.

Hopefully you have also seen our website at:
https://www.colonie.org/departments/historian/historicalsociety/
and our Facebook pages at:
https://www.facebook.com/HistoricalSocietyTownofColonieNY

We hold our annual elections for officers and trustees at our May meeting. The officers, who are elected for a two-year term, will be elected to serve until 2022. The trustees, who are elected for a three-year term, will be elected to serve until 2024.

The Board of Trustees conducts all activities of the Historical Society. Board Members participate in periodic Board meetings during the year, and can get involved in a variety of committee activities that foster wider knowledge and engagement around the history of Colonie. Note that due to COVID-19 all HSTC activities and meetings are conducted virtually via Zoom right now.

We have a few openings on the Board this year and would welcome individuals who want to volunteer as a Board Member. Interested? For more information contact our Recording Secretary, Laraine Gillette, at:
historicalsecretary@hotmail.com

Yes, I would like to become a member of the Historical Society of the Town of Colonie, New York, Inc. in the classification I have checked or renew my membership as noted. ☐

My annual dues payment in the amount of $_____ is enclosed.

Classification	Annual Dues	Classification	Annual Dues	Classification	Annual Dues
☐ Student and Senior	$10.00	☐ Family	$15.00	☐ Supporting	$100—$250
☐ Individual	$12.00	☐ Business	$50.00	☐ Benefactor	$250.00 & Up

Please accept my additional donation of $_____ as a gift to the Historical Society. ***The Historical Society is a not-for-profit corporation.***

Name _____

Address _____

City/Town _____ Zip Code_____ Home Phone #_____

Cell Phone # _____ E-Mail _____

Please mail to Membership Chairperson c/o Historical Society, Memorial Town Hall, 534 New Loudon Rd, Latham, N. Y. 12110-0508

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THE HISTORICAL SOCIETY OF THE TOWN OF COLONIE

Historical Society Founded 1971

MEMORIAL TOWN HALL
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518-782-2601

Kevin Franklin: Town Historian

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Support the Society's efforts to stimulate an appreciation of the historical heritage of your community. Join Now!

PRESIDENT'S MESSAGE

Hopefully you all are staying safe. I know many of you are in the process of receiving or on the waiting list for the COVID vaccine, and I hope that by the late summer or fall we will be back to a more normal situation as a result.

On Sunday, January 31st, we held our first Historical Society Zoom presentation for members and the community in lieu of our regular Sunday presentation at the Colonie Town Library. There were over 30 different people on that Zoom viewing Chris Leonard's presentation about the GE Realty plot in Schenectady. The initial feedback about the Zoom presentation that I received was positive, but I would like to know what you think about this kind of presentation whether you were viewing or not. E-mail your feedback to me at: Historical.Society.Town.Colonie@gmail.com

We will be exploring other Zoom presentations over the next few months. Watch our HSTC web site and our Facebook page for more information. We will all get through this difficult time—together.

Michael S. Radlick, PhD, President