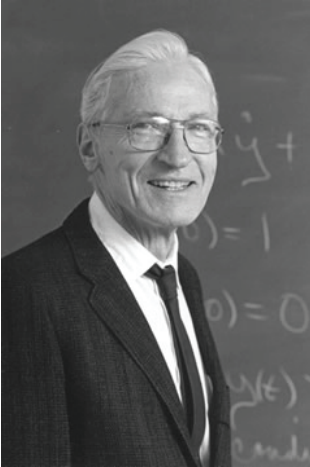


SELF-GUIDED CEMETERY TOURS



Script for Grove Street Cemetery Tour Tape 1

W. Jack Cunningham, April 2003



This is a picture of me in the late 1980's while I was a Professor of electrical engineering at Yale.

Hi! I'm Jack Cunningham. I am a retired professor of electrical engineering at Yale. I am now a Docent with the Friends of the Grove Street Cemetery. This is the first of several tapes that will guide you to grave sites of some of the scientists and engineers buried in the cemetery. This tape deals with grave sites along Cedar Avenue. The streets in the cemetery are all named for trees and are identified by signs.

We begin, standing on **HAWTHORN PATH** just inside the gate opening off Grove Street.

During the first one hundred fifty years of its existence, New Haven buried its dead on what is now the New Haven Green. Shortly before 1800 this area was becoming cluttered and a new burying ground was created in what is now known as the Grove Street Cemetery. The cemetery is over 200 years old. Soon after it was opened, many of

the gravestones, originally on the Green, were moved to the new location. The cemetery was first enclosed with a wooden fence. When this deteriorated the present brownstone wall was erected in 1845. A section of iron fence along Grove Street was intended to create a less confining atmosphere. The Grove Street Cemetery, as it is commonly known, is officially The New Haven City Burial Ground. It is a private corporation under the control of self-perpetuating Proprietors, the first cemetery in this country having such a structure. It is also the first to be laid out in family plots.

The **ENTRANCE GATE** was erected at the same time as the stone wall. It was designed by Henry Austin, a well known New Haven architect. The gate is in the Egyptian Revival style that was popular at the time. The words-The Dead Shall Be Raised-are inscribed over the gate. They come from St. Paul's first letter to the Corinthians, chapter 15, verse 52: "The trumpet shall sound, and the dead shall be raised." These words are also the basis for an aria in Handel's Messiah, "The Trumpet Shall Sound."

George Vaill, a great raconteur of Yale stories, had a story about this inscription. According to him when the Yale president at the time, Jeremiah Day, first saw the inscription, his comment was, "The dead shall be raised? They certainly shall if Yale ever needs the property." According to Vaill, every Yale president through Whitney Griswold, found an occasion to repeat that remark. Vaill persuaded Kingman Brewster to sign a document certifying that he would never make such a declaration. Nonetheless, at the celebration of the 200th Anniversary of the cemetery, Yale President Richard Levin again made the remark about raising the dead, but ascribed it to Arthur Twining Hadley instead of Jeremiah Day.

Incidentally, the Yale Library has an original watercolor drawing of the gate on which the words about raising the dead do not appear. Evidently Austin chose to add them at some later time.

In keeping with the Egyptian motif of the gate, there are many grave monuments in the form of obelisks, some large, some small.

The small brick structure, just inside the gate and built later, was a **CHAPEL** for funeral services. It has near its peak a gilded moth, an Egyptian symbol of the soul of a departed person fluttering up to heaven. Plaques are fastened to the wall of the structure identifying the cemetery as a National Historic Landmark, recorded in the National Register of Historic Places. The structure is now used as the office for the superintendent, who oversees operation of the cemetery. He has a file of all those buried in the cemetery, with their grave locations.

We are now going to walk westward along Hawthorn Path, until we reach the fourth street branching northward, to the right, which is Cedar Avenue. At frequent intervals along the edges of the streets small metal markers are placed in the ground carrying numbers to identify the locations. These markers are often obscured by dirt or leaves, and may be hard to find.

We are going to **NUMBER 2 CEDAR AVENUE**, at the intersection with Hawthorn Path, which is the family plot for Benjamin Silliman. It is enclosed in an iron fence. It contains a large gray stone column for Silliman, a pink upright stone slab for James Dwight Dana, a similar upright slab for Maria Dana, as well as stones for other family members.



Number 2 Cedar Avenue is the family plot for Benjamin Silliman (1779–1864). This is the Silliman for whom Silliman College is named.

He entered Yale at the age of 13. Upon graduation he planned to study law, but the Yale Corporation saw fit to appoint him professor of chemistry at a time when he knew nothing of the subject. The Corporation sent him to Philadelphia, where he learned chemistry, botany, anatomy and surgery, and to Europe, where he studied and purchased books and scientific apparatus. Later he added geology to the sciences in which he was proficient. He was described as being “in the front rank of American chemists of his day,” and “the most important scientific figure in the country.” He brought serious science to Yale. He was a good public lecturer with interesting presentations and skillful demonstrations. He was largely responsible for starting the Yale School of Medicine.

He was a seriously religious man and, at a time when the public tended to have strong religious convictions, this was helpful to him in influencing the introduction of science. He founded the American Journal of Science, known familiarly as Silliman’s Journal, which is still being published. He was one of the original members of the National Academy of Sciences.

This elder Benjamin Silliman had a son, Benjamin Silliman, Jr., also a well known scientist. He is buried in another part of the cemetery. Silliman also had a daughter, Henrietta, who has married to James Dwight Dana, both of whom are in the father’s plot.

James Dwight Dana (1813–1895) was primarily a geologist. He was a voluminous author, producing a total of 214 books and papers. He was someone who could work with large

projects involving many fine details. He became the editor of Silliman's Journal. During the years 1838–1842 he took part in a U.S. sponsored expedition to the South Seas and subsequently spent thirteen years writing reports about it. When the elder Silliman retired in 1849, Dana succeeded him as professor of natural history, later called geology and mineralogy.

The Danas lived in the house at the corner of Trumbull Street and Hillhouse Avenue, now occupied by the department of statistics. The house was designed for Dana by Henry Austin of the Egyptian gate. Dana's daughter, Maria Trumbull Dana, lived there until her death in 1961. Just after World War II, she often had a small electric-powered automobile parked in the front driveway. It was steered with a tiller and had a vase for cut flowers. When Miss Dana was in her nineties, she still baked a cake on the birthday of her father and shared it with graduate students in the geology department.

We are now going to Number 4 Cedar Avenue, the site for Jedediah Morse. It is just north of the Sillimans and is also enclosed in an iron fence. The Morse grave is marked by a tall cylindrical stone column topped by a sphere.

NUMBER 4 CEDAR AVENUE is the site for Jedediah Morse (1761–1826). Morse was a minister in Charlestown, Massachusetts for thirty years. He was a popular preacher who found time to help found the Andover Theological Seminary and the Park Street Church. He was a strong Congregationalist and was deeply involved in arguments that led to the separation of the Unitarians.

Jedediah Morse became interested in geography and published the first book on the subject in the U.S., entitled, *Geography Made Easy*, in 1784. It turned out to be very

popular, and went through twenty-five editions during the author's lifetime. He produced other books on geography, and essentially monopolized the field. He became known as the "Father of American Geography," although he was largely a collector and compiler of material from other sources.

He and his wife had eleven children, only three of whom survived infancy. The eldest was Samuel F. B. Morse, who achieved fame as a portrait painter, and whom most people recognize as the inventor of the electric telegraph and the Morse code.

We are now going to Number 5 Cedar Avenue, the site for David Humphreys. It is located directly across Cedar Avenue from the Morse plot. A stone obelisk marks the grave of Humphreys.

NUMBER 5 CEDAR AVENUE is the site for David Humphreys (1752 –1818). He was a brilliant soldier and the Aide de Camp for General George Washington. After the Revolution he became the first ambassador to both Spain and Portugal He introduced into Connecticut merino sheep, grown for their wool. He built a mill in Derby for weaving woolen cloth. Both Presidents Thomas Jefferson and James Madison ordered suits made from Humphreys's cloth. Amid his other activities, Humphreys found time to write history and poetry.

We are now going to Number 14 Cedar Avenue, the family plot for Eli Whitney. It is north of Humphreys's plot, on the opposite side of the street, and is enclosed in an iron fence. The site for the elder Whitney is marked by a brownstone sarcophagus, while that of his son is marked by a rectangular column of granite.

NUMBER 14 CEDAR AVENUE is the site for Eli Whitney (1765–1825). Whitney entered Yale from a farm in Massachusetts at the age of 23. After graduation he went to Georgia as tutor on a cotton plantation. There he saw the slow and difficult process by which cotton fibers were separated from the seeds by hand. The story goes that he watched a cat, trying to get at a chicken by clawing at it between the bars of a cage, and succeeding only in scratching out a few feathers. He used this idea to make a machine that would claw the cotton fibers away from the seeds. The resulting cotton gin is said to have made economically possible the creation of large southern cotton plantations, with all their good and bad features.

After others had essentially stolen his idea for the cotton gin, Whitney returned to New Haven and managed to get a contract with the U.S. government to make a large number of muskets. At that time the various parts of a musket were each made and fitted together by hand, with the result that parts were not interchangeable. Whitney proposed making all parts to carefully controlled standard dimensions, so that any combination of parts could be assembled to make a musket. It turned out that available technology did not allow him actually to do this, but his ideas did lead to industrial mass production based on standardized interchangeable parts. While Whitney lived in New Haven, his arms factory was located at falls on the Mill River at the base of East Rock, just north of the New Haven town line in Hamden. A dam there provided water power for his machinery. At the present time the Eli Whitney Museum is located at the site of the Whitney arms factory.

Eli Whitney married relatively late in life and had one son, born five years before the father died. The son, Eli Whitney, 2nd or Jr., (1820–1895) is buried in the same plot on Cedar

Avenue as is his father. It was intended that the younger Whitney run the arms factory, but until he was old enough to do so it was run by nephews of the elder Whitney, named Eli Whitney Blake and Philos Blake. The younger Whitney turned out to be a very capable person and under his leadership the arms factory was finally able to produce successfully arms with interchangeable parts.

About this time, a group of New Haven citizens decided that the city should have a central supply of water, replacing the individual wells that had been used as sources of water up to that time. The younger Whitney was persuaded to lead the formation of the New Haven Water Company. He raised the height of the dam on the Mill River, where the arms factory was located. This created Lake Whitney, which became the source of water.

Yet another, later Eli Whitney (the 3rd), is buried at the north end of Cedar Avenue. He was with the water company.

We are now going to Number 30 Cedar Avenue, the site for Denison Olmsted. It is some distance north of the Whitneys, on the same side of the street. His gravestone is an upright slab of white marble.

NUMBER 30 CEDAR AVENUE is the site for Denison Olmsted (1791–1859). He was professor of medicine and natural philosophy, interested in mathematics and astronomy. He was a good teacher and wrote textbooks. He published about meteors, hailstones, and the aurora. He also calculated the orbit of Halley's Comet, and was able to observe it when it returned in 1835.

We are now going to Number 37 Cedar Avenue, the site for Ithiel Town. It is located on the west side of the street,

some distance from the street and just outside an iron fence surrounding an obelisk. The stone is an upright slab of gray granite.

NUMBER 37 CEDAR AVENUE is the site for Ithiel Town (1784–1844). Town was a well known architect in New Haven. He designed both Trinity Church and Center Church on the New Haven Green, among other structures. He devised a way of building the upper tapered part of the steeple of Center Church at ground level within the lower square brick tower, and hoisting the completed steeple into place through the tower. He also designed a State House on the Green, at the time when New Haven and Hartford alternated as the seat of government in Connecticut.

Town invented and patented a way of building bridges making use of what became known as the Town lattice truss. This truss required only standard pieces of lumber, and could be assembled by a carpenter using simple hand tools. Many Town truss bridges were built, with the inventor collecting a royalty of one dollar per foot. Only a few years ago, students at the Eli Whitney Technical School erected a Town truss bridge across the Mill River at the site of the Eli Whitney Museum. You may go there and see it for yourself. There is also an earlier Town truss foot bridge, made of iron, crossing the Mill River less than half a mile below the Whitney Museum.

We are now going to Number 50F Cedar Avenue, the site for John Kirkwood, Lars Onsager, and others. It is at the northeast corner of Cedar Avenue and Myrtle Path. Graves of both Kirkwood and Onsager are marked by upright slabs of gray stone, set back from the street.

NUMBER 50 OF CEDAR AVENUE is the site for several individuals once on the faculty of Yale.

John Gamble Kirkwood (1907–1959) was a physical chemist who was on the faculty at Yale a relatively short time before he died. His gravestone, roughly 6 feet high and 2 1/2 feet wide, includes some twenty lines describing his many accomplishments and achievements.

Lars Onsager (1903–1976) was in the chemistry department at Yale at the same time as Kirkwood. Onsager was J. Willard Gibbs professor of chemistry. His gravestone is just to the right of that of Kirkwood, and is a little wider but not quite so tall. The Onsager stone has minimal information:

Gibbs Professor

Nobel Laureate*

An asterisk following the Nobel listing refers to a footnote at the bottom of the stone with the mere notation: Etc. Evidently Onsager thought the Nobel award was sufficient to substantiate his stature.

Both Kirkwood and Onsager were members of the National Academy of Sciences.

We are now going to Number 51 Cedar Avenue, the site for James Brewster. It is opposite the Onsager site. The grave is marked by a rectangular column of brownstone.

NUMBER 51 CEDAR AVENUE is the site for James Brewster (1788–1866). Brewster opened a shop in New Haven in 1810 to build horse-drawn carriages at a time when only heavier vehicles were being built in this country. He produced a varied line that was widely sold and became well known as “Brewster wagons.” Presidents Andrew Jackson and Martin Van Buren purchased Brewster

carriages. Carriage building flourished in New Haven for the entire nineteenth century, and disappeared abruptly with the coming of the automobile.

Brewster was one of a group that started the first railroad for the area, running between New Haven and Hartford. The present railroad follows the same route. The cost was estimated at \$830,000. Construction took place during a national financial panic, and completion was possible only because of the resources provided by Brewster.

Brewster was civic minded, extending and widening city streets. He tried to create better working conditions for those who worked in his factory and in other similar establishments, and he established an orphanage. At his death he was described as “one of the best citizens New Haven or any other city ever had.”

James Brewster, the carriage builder, was not related to Kingman Brewster, Yale president, nor to Frederick Brewster, banker, who lived in the estate on Whitney Avenue known as Edgerton. Both are well known persons buried in the Grove Street Cemetery.

This completes the first tour through a part of the cemetery.

