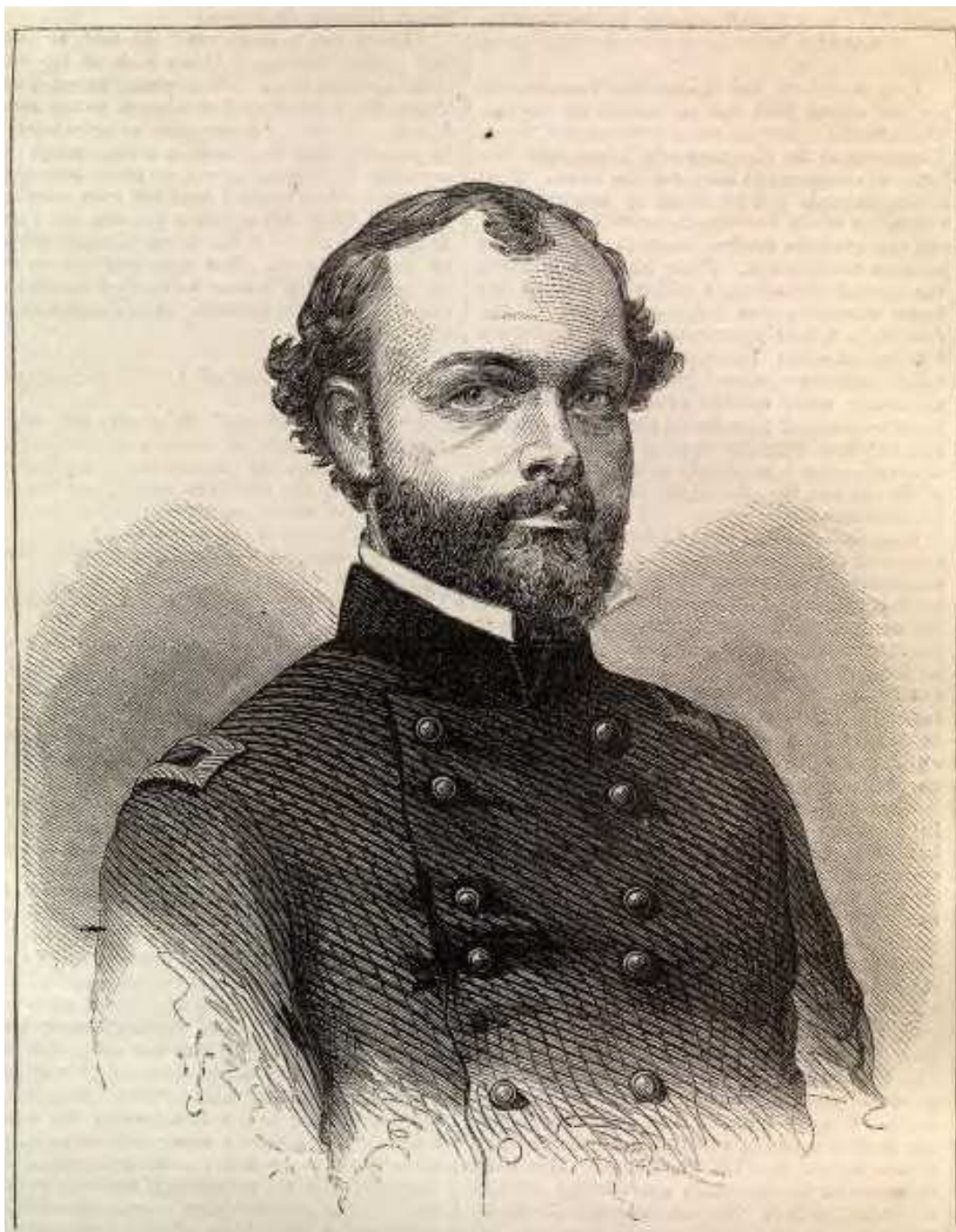


The
Century
House
Historical
Society

NATURAL NEWS

Volume 9 Issue 1

Spring 2007



Gen. Quincy A. Gillmore see page 2

2007 Membership Dues Notice Inside

Century House Historical Society

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Message from the President

You might wonder why Gen. Quincy A. Gillmore graces the cover of this issue. Gillmore, (US Army Corps of Engineers) was the author of *Practical Treatise on Limes Hydraulic Cements, and Mortars*. Gillmore completed his manuscript prior to the outbreak of the Civil War, having completed it in the summer of 1861. The book was first published by D. Van Nostrand in 1864. We are fortunate in having both a 1st edition (1864) and a 5th edition, revised and enlarged (1874). The 5th edition published in 1874 is of special interest for several reasons. 1. The first tentative steps in American portland cement manufacturing had taken place just prior to the publication of this edition. But these first steps are not noted in this edition. 2. The 5th edition has a brief description of the use of a cement mixer in projects done in 1870/71.

Of greatest local interest is that this 5th edition originally was purchased by Cornelius I. Lefever. Lefever inscribed his name, date of purchase (October 10, 1874) and residence (Creek Locks, Ulster Co., N.Y.). The book, sold in "as is" condition by Pages Past, Kingston antiquarian book dealers, was rather worn, well used, marked up, and chewed up. Not a book collectors dream, more likely a discard. The well used condition is easily explained, C.I. Lefever, nephew, of Peter Lefever pioneer Ulster county cement manufacturer, also entered the cement manufacturing business. The pencil marks highlight those sections of the book that had special interest to him. Lefever added his own computations related to cement manufacturing in the margins of the book.

That this book has survived for over 133, and some of that time in an outbuilding, shed or barn, supports the hope that other documents, ledgers (like the John Charles store ledger described elsewhere in this issue), books or items from our past will surface and be added to the archives and collections of the Society.

Regards, Dietrich Werner

Welcome New Members

490-F Frank Felicello - Marlboro, NY
 491-I Crystal Hotaling - Warren, MA
 492-I Servero Canzian - Lake Katrine, NY
 493-I Peter Yakovlev - Brooklyn, NY
 494-I Katie Kudsmo - Brighton, MA
 495-I Alan Kasprak - Sutton, MA
 496-I Benjamin Keber - Brighton, MA
 497-I Anthony Keber Jr. - Omaha, NE
 498-I Caroline Shields Rivervale, NJ
 499-I Yvette Kuiper - Brighton, MA

Additions to the Society Library

50. **The Concrete House and its Construction.** Maurice M. Sloan. Association of American Portland Cement Manufacturers. Philadelphia 1912.
51. **Concrete Pipe Design Manual.** American Concrete Pipe Association. Arlington, Va. 1970.
52. **Portland Cement Its Composition, Raw Materials, Manufacture, Testing and Analysis.** Richard K. Meade. The Chemical Publishing Co. 1st ed. Easton, PA 1906.
53. **Portland Cement Its Composition, Raw Materials, Manufacture, Testing and Analysis.** Richard K. Meade. The Chemical Publishing Co. 2nd ed. Easton, PA 1911.
54. **Portland Cement Its Composition, Raw Materials, Manufacture, Testing and Analysis.** Richard K. Meade. The Chemical Publishing Co. 3rd ed. Easton, PA 1923.
55. **The Rotary Cement Kiln.** Kurt E. Peray & Joseph J. Waddell. Chemical Publishing Co. New York 1972.
56. **Practical Treatise on Limes, Hydraulic Cements, and Mortars.** Q.A. Gillmore. D. Van Nostrand. 1st ed. (1864) & 5th ed. (1874) New York.

Have you paid your 2007 membership Dues?

If you see a red mark in the box below that means your dues are past due. A renewal slip is enclosed. Please return it with your dues.



We still have a few copies of Peter Genero's book, *Thank Rosendale*, available. The cost is \$16.65 + \$4.45 S&H (New York State residents must add sales tax)

SPRING 2007 At the Snyder Estate

It has been a busy Spring at the Snyder Estate. This years flooding had no great impact on the Snyder Estate grounds. But a severe wind storm downed several trees. As a precaution six large trees that towered over our electric service line had to be removed. [photo 1-4 Thanks to the Two Brothers Tree Service and Lower Esopus River Watch for a job well done.



1



3



5

lower Tan House Brook dam. [photo 6] Repair work on the wall and culverts will continue through the summer. The upper parking lot is also getting some attention. The improvements, grading and stone,



7



2



4



6



8

are being done by Lower Esopus River Watch. This section of the parking lot had been become overgrown with scrub. When completed this project will greatly enhance the parking facilities in the upper lot. [photos 7 & 8]

“Hydraulic Lime or Cement”

That was the headline of an article published in the January 21, 1848 issue of the Rondout (New York) Courier. [dew]

One of the most lucrative and permanent fields for the employment of capital and industry is found in the inexhaustible ledges of hydraulic lime and ordinary lime stone running parallel with the Rondout creek. The Vlight-bergh, a bold eminence of 200 feet on the western shore of the Rondout, is an apparently isolated —— of hydraulic limestone—which for convenience we will call *cement* stone. Though doubtless the cement and lime strata are continuous along the bold shores of the creek towards its source, yet we lose sight of it in its progress until we find it again on the brow of the eminence overhanging the mouth of the Twaalfskill at Wilbur. The altitude of the bluff at Wilbur is a little less than that of the Vlight-bergh, which it resembles strikingly in its abruptness and apparent termination. Crossing the deep valley of the Twaalfskill and gaining the lofty ridge beyond, we find a broad range of hills to be a mass of cement and lime stone, showing itself in parallel ledges from the sheer cliff which overhangs the Rondout creek. The course of the cement formation is thence in a almost straight line N. & S. as far as High Falls, losing in altitude, however, in its progress to the interior, but showing the main ridge within a short distance of the creek, broken in the vallies formed by the numerous streams tributary to the Rondout and cropping out in spurs, bluffs and ledges in its course. The cement strata reappear near Rosendale in all their previous unbroken and precipitous loftiness, and cross the creek at High Falls where the Rondout descends a number of ledges about 80 feet. On the S. E. shore of the Rondout, the cement formation is not continuous, occasionally appearing, however, in detached masses, as in the lofty quarries opposite Wilbur, and near South Rondout.

The volume compiled by the geological survey of the State, has the following brief notice of the cement formations of this portion of the State:

“ULSTER COUNTY— Hydraulic limestone is found in great quantities in this county and the manufacture of cement has for several years been quite extensively carried on. It is probably, however still only in its infancy.

“The beds of hydraulic limestone that yield the cement in this county are located in the vicinity of Kingston, Rosendale, Lawrenceville and High Falls. The mode of preparing the cement is sufficiently simple. The limestone is first reduced to small fragments which are then thrown into a kiln, with layers of the screenings of anthracite intermixed. At an interval of twelve hours. The lower layers of the kiln are removed, and fresh portions of limestone thrown into the upper part. These operations are so managed, that each layer is subjected to heat for about three days.

“The lime thus calcined is of a light drab color; and when reduced to powder, and mixed with about one third its bulk of sand and made into a paste with water soon becomes hard. The grinding is performed in a mill, and the powdered cement is put up in barrels, which are lined with paper, to prevent as much as possible the access of air.

“According to Mr. Mather, there were during the year 1839, sixty kilns in this county for the manufacture of cement, and it is estimated that 600,000 barrels were manufactured dur-

ing that year. It was used in the Croton Water-Works, shipped to various Atlantic ports and to the West Indies.”

We are informed that the first practical knowledge of the existence of the cement stone of the Rondout, was one of the fruits of the exploration of the engineers of the Delaware and Hudson Canal about 1826. The cement was used in constructing the canal locks, and the precise value of the material thus made known. Since that period it has been inconstant demand, for locks, docks, aqueducts, cisterns, cellars, and indeed all constructions of brick or stone under water or the surface of the earth. It is used too informing water pipes, making the floors of cellars, &c., readily hardening to a stony consistency if mixed with one third of coarse sand.

In 1839-'40 the Cement trade reached its maximum, owing to the immense demand for the Croton Aqueduct. Since the completion of the Croton works the demand has become steady and the business regular. In 1846 7,825 tons or 47,000 barrels passed the Eddyville lock to tide water, in 1847 the quantity reached 10,715 tons, or about 65,000 barrels.

Our returns do not include quantities brought to tide water by other means than canal transport, nor that manufactured by several kilns on the Rondout below Eddyville.

Nor does this estimate take in the operations of the company at Vlight-bergh which quarries the stone, shipping it to Newark, N.J. where it is manufactured.

Discovery of Rosendale Cement 1825 not 1826

The report in the January 21, 1848 issue of the Rondout Courier incorrectly states that the D & H Canal engineers discovered cement stone in 1826. Below is copied a letter written by Maurice Wurts to Andrew A. Bartow in December, 1825. This letter firmly places the discovery of cement stone in Rosendale in the year 1825. [dew]

KINGSTON, December 9, 1825.

Doct. A.A. Bartow:

Dear Sir:— I am desirous of seeing you here with as little delay as possible, and that you may understand the subject I have in View, I will in part state that I wish to have several points examined and experiments made with the Water-Lime found near the line of our canal. You will readily perceive the necessity of our having the matter attended to immediately, on account of the advanced season of the year, and that I should see you here to confer on the subject before you commence operations. I shall expect, if you are willing to engage to see you to-morrow or Sunday: and if you decline, to hear from you by that time at farthest. With great respect.

Yours, most truly,

**MAURICE WURTS,
Agent for the Delaware and Hudson Canal Company.**

MORTAR by Robert L. Pell

The following article was written by R. L. Pell, a Town of Esopus farmer famous for growing the Yellow Newton Pippin apple and marketing it for sale. He also raised the Isabella grape in his vineyard. Pell became a well known agriculturist, particularly for his grapes and fruit trees. This article was published in the Seventh Annual Report of the American Institute of the City of New York which was made to the New York State Assembly March, 29, 1849.

Pell makes no mention in his article that one of the leading centers of American Natural cement manufacturing was only a few miles from his estate 'Pelham Manor' in Esopus. Unfortunately both his brick home and the large stone warehouse built on the Hudson for shipping his fruit crops were torn down around 1904. The dock still remains and possibly fragments of mortar that might determine if Pell used local Rosendale cement. [dew]

In the days of Italy and of Greece, mortar was not used in constructing temples; the immense stones made use of rendered it unnecessary, as their weight was sufficient to keep them in their places. In ancient Babylon, bitumen was sometime employed to cement the stones of their houses together, remains of which are said to exist even now. The cement made use of by the ancient Romans must have been superior to any we now have in use, for example : The emperor Trajan built a bridge across the river Danube, which cannot possibly be too much admired, though all the works of Trajan were magnificent in the extreme, this bridge far exceeded them all. The length was 4770 feet, the piers were distant from each other 170 feet. And there were 20 of them, built of square stone laid in cement, each pier was 150 feet high and 60 feet in breadth. The most extraordinary features to be observed is that the river at this point is exceedingly rapid, very deep, and has a soft, muddy bottom. The emperor Adrian afterwards succeeded in breaking down the arches, but the piers he could not destroy, and they there remain a monument of the ingenuity of Trajan and his architect, as well as the strength and lasting properties of his mortar. I infer from the fact that among the ancient Grecian nations the arch was not understood, that they did not know the use of mortar and the antediluvians certainly could not as no accounts have been handed down to us, that they inhabited houses composed of more than one apartment, of different stories. The idea was first given to mortals, I imagine, by the deity; when he commanded Noah to construct his ark of different stories and rooms. If rooms, one above the other had been known to the antediluvians, God would have given Noah a perspective view of the rooms and stones as he did Moses.

The Chinese probably knew the use of mortar long before the Greeks and Romans, and consequently the use

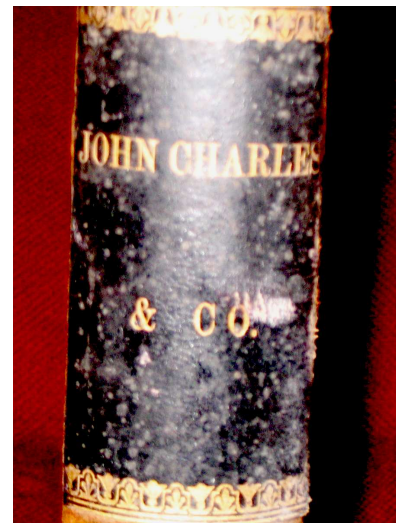
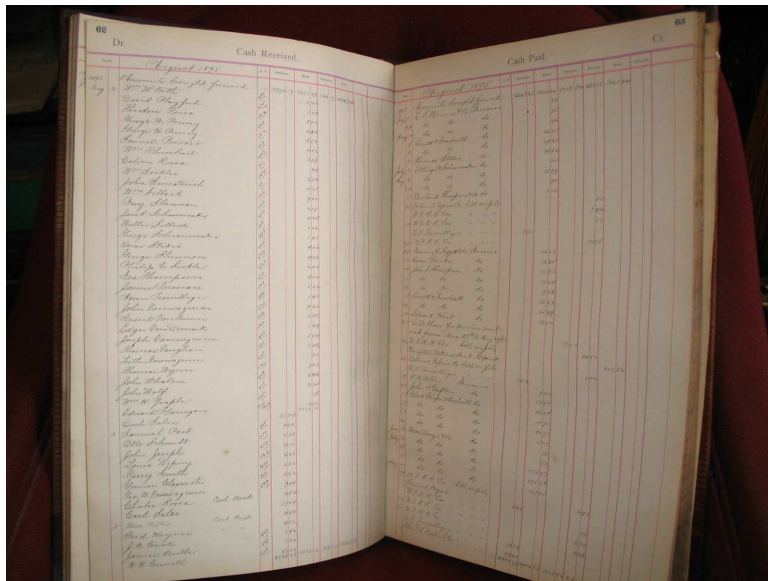
of the arch, in fact, no modern nations even to this day, have been able to equal them in this respect, notwithstanding we boast of elegance and magnificence. The Chinese have constructed a bridge of a single arch, the materials laid in mortar, the span of which is six hundred feet, and the height of the arch 750 feet. The middle arch of the Westminster bridge, London, is only 76 feet span, and springs from about two feet above the low water mark. The span of the middle arch of Black Friar bridge is 100 feet, built in the elliptical form, and the most stupendous bridge in all Europe is that over the Tawe in Glamorganshire, consisting of one arch, the segment of a circle, the diameter of which is 175; the chord of the segment is 140 feet; and the height 35 feet. You will therefore, observe how far superior the Chinese arch is to the best in enlightened Europe, by whom the Chinese are called a benighted people. Our common mortar is composed of lime, sand and water, mixed until it forms a paste, which dries and becomes almost as hard as stone, and the strength of our walls is in proportion to the excellence of the lime or calcareous earth from which this substance is made, being usually combined with other matters; it is good in a ratio equivalent to its detachment from these combinations, which is effected by exposing the lime stones to a very strong heat, in what is termed a lime kiln; these stones consist of lime combined with carbonic acid gas in a solid state, and before being burned is termed carbonate of lime; when red heat is applied the gas immediately flies off, and the substance left is termed quick lime, and is soluble in water, when water is applied with a view of slacking it, it cracks and falls into fine powder, a portion of the water escapes in the form of steam, but much of the largest quantity combines with the lime and becomes solid, and forming a substance called by chemists hydrate of lime, and by masons slacked lime.

Limestones affording lime appropriate for mortar are of two kinds, viz : those which consist of nearly pure carbonate of lime; and those which consist of carbonic acid and a portion of iron, magnesia or clay. That made from the first is far superior, as it dries at once when exposed to the air, and becomes very hard, and will not soften in water applied when perfectly dry; if, however, water is kept in contact with it before perfectly dry, as in drains, &c., it will never set or harden, and is therefore not used for hydraulic purposes. Limestones containing clay, especially if they are ferruginous, are termed when burned, hydraulic or water lime, and when mixed with sand sets even under water. Builders are generally of opinion that the best lime is obtained from the hardest limestone; this is not so, however. Lime made from porous, soft stone, absorbs from the atmosphere the carbonic acid gas it lost in burning much more rapidly than the lime made from compact, fine grained stone, and if used as soon as mixed, makes better mortar than the hard stone lime, as was proved by the late Lord Stanhope, of England.

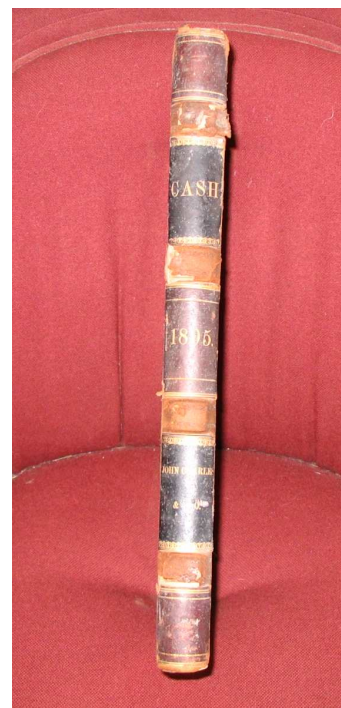
1895 BINNEWATER STORE LEDGER ADDED TO SOCIETY COLLECTIONS

John Charles opened a general store at Binnewater April 1, 1885. He opened the store the same year that he became the general superintendent of F.O. Norton's cement works at Binnewater. J. Charles also served as the Binnewater Post Master for eleven and half years, December 2, 1882 to June 7, 1894. [See the list of Binnewater Post Masters.]

The ledger has 246 pages and has entries from May 1895 to May 1896. It appears to be a record of all the store transactions both cash received and cash paid out for the operation of the store for that twelve month period. It would be safe to assume that a majority of the folks named were employees of F.O. Norton's cement works which were adjacent to the store. Pay day most likely occurred at the store. A handy arrangement for Charles. *Continued next page.*



DATE.		L. F.	SUNDRIES.	MOOR.
1895	Amounts brought forward		236531	1325278
July 9	L. S. Wiggins & Co Invoice			50
27	do do do			70
Aug 17	do do do			40
8	Evans & Bradwell			26 20
9	do do do			64 80
9	Thomas Stokes			49 50
July 3	Ettinger & Schoromaker			20
Aug 8	do do do			18 30
14	do do do			90
5	Dunland Thompson & Co do			30
21	National Express Co bill on file			
	W. V. R. R. Co			
22	W. V. R. R. Co			
	C. V. Trivilliger			
23	W. V. R. R. Co		460	



Binnewater Post Masters

1875-1953

Although the post office was officially established on May 7, 1875, the postmaster was not commissioned and did not serve until August 1875.

<u>Name</u>	<u>Title</u>	<u>Date Appointed</u>
Isaac I. Carman	Postmaster	08/02/1875
Daniel Sullivan	Postmaster	02/14/1876
Isaac I. Carman	Postmaster	01/12/1880
Henry C. Carman	Postmaster	09/27/1881
Adolphe Sorge	Postmaster	03/27/1882
John Charles	Postmaster	12/26/1882
John N. Cahill	Postmaster	06/08/1894
Frank Budington	Postmaster	05/22/1896
Claude M. Shaw	Postmaster	05/19/1898
David Burke	Postmaster	08/24/1907
John B. Cook	Postmaster	03/04/1912
Silas H. Castor	Acting PM	05/09/1928
Benjamin B. Bardin	Acting PM	10/25/1928
Benjamin B. Bardin	Postmaster	03/06/1929

The post office was discontinued on December 30, 1933; mail to Kingston, NY. The post office was reestablished August 6, 1934.

William R. Wiesler	Postmaster	08/06/1934
Mrs. Hazel V. Freer	Acting PM	02/09/1936
Mrs. Hazel V. Freer	Postmaster	07/31/1936

Mrs. Freer's name was changed to Mrs. Hazel V. Kloefer by marriage on August 12, 1950. The post office was permanently discontinued on November 30, 1953; mail to Kingston.

[Thanks to the USPS for the above list of Binnewater Post Masters]

From the John Charles Cash Book CASH RECEIVED June 1-7, 1895

Hasb. Van Demark	John Lem.....	Thomas Duffy
Samuel Post	Charles Bundy	Herman Schurter
C. M. Shaw	Patrick Joynt	Lewis Morey
Garry Deits	Wm. Broadhead	Jason Bush
Lewis Brundage	Thomas Butler	Wm. Bush
John Bozovich	Edward Burk	Jacob Broadhead
Austin Countryman	James Costello	Edward Carney
Chauncy Christiana	L. B. Dewitt	John H. Christiana
Virgil Christiana	Michael Dugan	Michael Duffy
John Dugan	Laurence Duper	James H. Duffy
Patrick Doran	Wm. Duffy	Chester Dyer
John Decker	Simon Dubois	Abram Deyo
Lewis Depuy	Patrick Farrell	Hugh Farrell
Edward Flanagan	Michael Foley	A.H. Gillespie
Michael Jecovich	George Jecovich	Luke Kelly
Dennis Maloney	Tim. Mahoney	Frederick Markel
Patrick McLaughlin	John Markle	Thomas Mulohill
Andrew Pine	David Playford	Theodore Pine
Samuel Provost	Wm. Rhinehart	Calvin Roosa
Abram. Schoonmaker	Wm. Sickles	John Smiatovich
Wm. Selleck	Benj. Sherman	Garry Smith
Jacob Schoonmaker	Walter Selleck	Oscar Stokes
Geo. Schoonmaker	Philip C. Sickles	Geo. Sherman
Ira Thompson	James Tresnau	Aaron Terwilliger
Gross Terwilliger	Frank Van Buren	Geo. Vanwagenen
John Vanwagenen	Thomas Vaughn	Edgar VanDemark
Joesph Vanwagenen	Thomas Wyser	John Whalen
Luther Vanwagenen	John Wolf	Wm. H. Yeaple

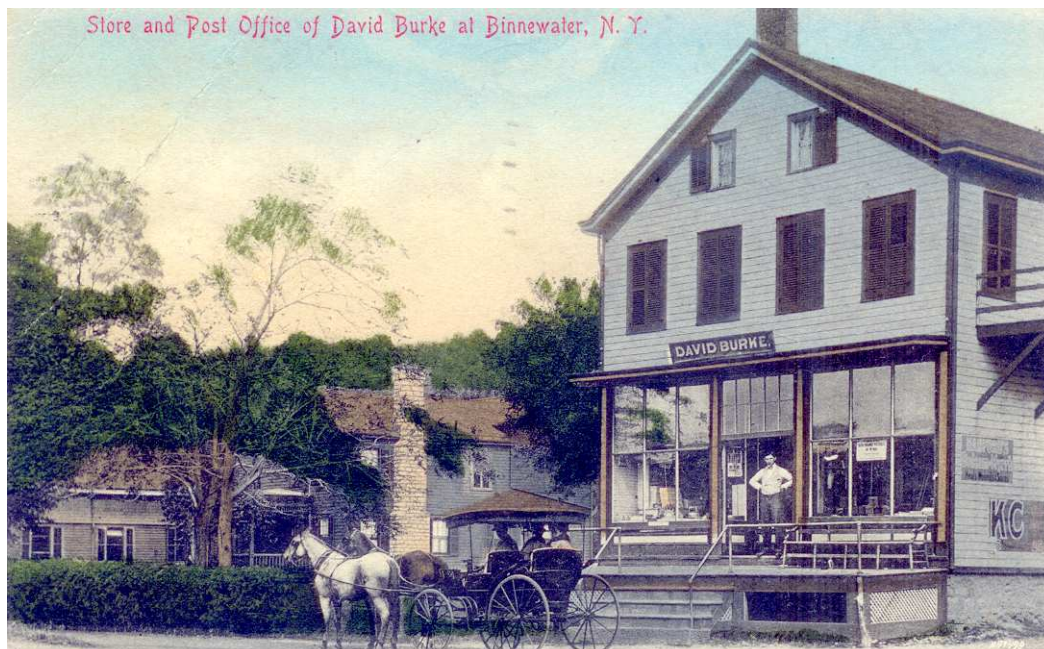
The above named folks paid their merchandise or Sundries bill at the store John Charles maintained

Continued.

He probably had the cement company payroll book in one hand and the store account book in the other, paying the workers with one hand and collecting with the other. No dead beats on any of his store accounts.

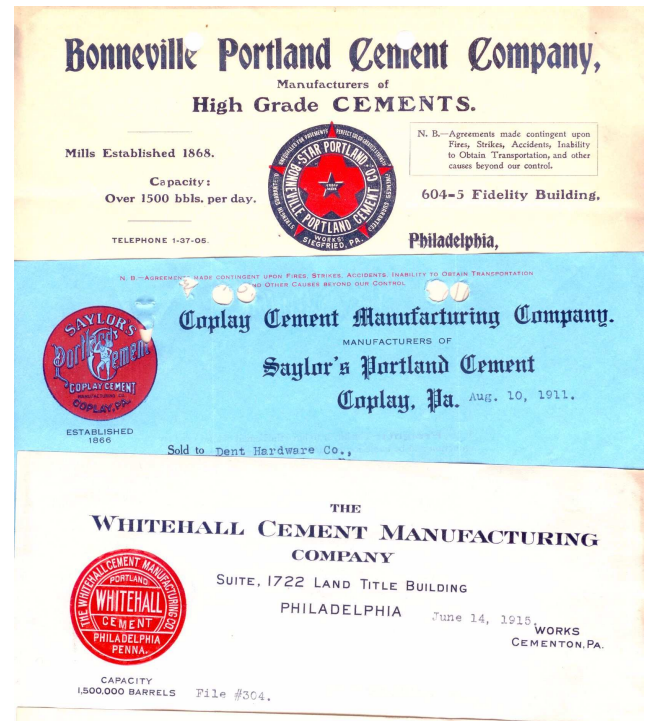
The addition of this ledger to the cash, daily, and payroll ledgers from the A.J. Snyder & Son cement works greatly adds to a better understanding of the lives of the men and families who helped manufacture the world famous Rosendale cement. [dew]

For a detail of John Charles see the Winter 1999 issue [Vol. 1, No. 4] of the Natural News.



David Burke's store (c1909) formerly owned by John Charles.
Now home to the Women's Studio Workshop

Collection of Early New Jersey and Pennsylvania Portland Cement Company Letters



Sherrie Smith, our Society member from the Milwaukee, Wisconsin area, has a keen eye for cement related items. Sherrie found a collection of cement company letters written during the peak period of competition between the manufacturers of American (or Rosendale) Natural cement and manufacturers of American Portland cement.

The collection spans the end of the nineteenth and beginning of the twentieth century, from the mid 1890s to 1919. Many of the letters are decorated with the cement company's colorful logo. Notice that most of these logos are round, the better to be able to fit the round head (top) of the wooden barrels in which the cement used to be shipped. Many of these logo designs continued to be used long after the use of wooden barrels had ended. The round logos can be found on the more modern cloth and paper bags. [dew]



Snyder Estate visitors displaying examples of round logos on cloth cement bags.

TRADITIONAL MASONRY

A Quarterly Magazine for the
Masonry Preservationist



Spring 2007

The Return of American Natural Cement

by Susan Brimo-Cox



The Brooklyn Bridge in 1894

Photo provided by Century House Historical Society

If you don't know what natural cement is, you're not alone

Even experts in traditional and historic masonry have been scratching their heads when the topic of “natural cement” is raised. Part of the problem is that natural cement use in the United States had a strong burst of use in the 19th century, but was quickly overtaken by portland cement from 1900 on. Now, as restoration and conservation activities increase on buildings constructed in the 1800s, the industry is relearning about American natural cement.

American natural cement rock was formed a very long time ago. Kurtis Burmeister, assistant professor of geology at University of the Pacific in Stockton, Calif., has studied American natural cement geology in the Rosendale region of New York. “I always get a kick trying to explain that the binder is ground-up remains of sedimentary rock deposited 420 million years ago in a world very different from today,” he says.



New York & Rosendale Cement Co.: drillers at the Black Smoke Mine. Photo provided by Century House Historical Society, Jeff Kraus Collection

The rocks used to make natural cement include dolostone or limestone. Limestone is essentially calcite. Calcite plus magnesium makes dolomite. Dolomite forms dolostone when combined with fossils and some clay content. This ideally balanced, naturally occurring rock makes natural cement that needs no additives.

Because of the natural history of the land mass that became the United States, there are many areas where you find these kinds of rocks, Burmeister explains. Sedimentary rock, like dolostone and limestone, is deposited in shallow seaways. A good portion of the American continent was a shallow sea at one time. Natural cement rock has been found in New York, Pennsylvania, Maryland, Virginia, Georgia, Kentucky, Indiana, Illinois, North Dakota, Wisconsin and other states. In mountainous areas, such as along the Appalachians, originally flat layers of rock were uplifted and

folded. Then, centuries of weathering exposed the underlying rock.

A variety of methods, including room-and-pillar mining, were used to extract cement rock from the ground, says Burmeister. It was not a simple process and it was very hazardous. Each quarry area had to be approached individually.

Natural cement takes hold in America

Before natural cement there was lime putty, and there are many examples of cement-free masonry remaining today. But as America entered the industrial age, the industry faced new challenges.

Dietrich Werner, president of the Century House Historical Society in Rosendale, N.Y., points to Canvass White, an engineer working on the building of the Erie Canal, as the man primarily responsible for developing American natural cement. In

1817, when American canal building was in its infancy, White was sent to England to investigate how the British built their canals and to see what kind of mortar they used. After spending several months in England learning about hydraulic cement, White returned to the United States and searched the Erie Canal route for material to use as hydraulic cement. Werner says that White had found the right kind of rock by 1818, and the



New York & Rosendale Cement Co.: the Black Smoke Mine. Photo provided by Century House Historical Society, Jeff Kraus Collection

American natural cement industry had begun.

After the Erie Canal, White went on to work on other canal projects, started a natural cement factory, and in 1820 obtained a federal patent for the manufacture of “Water Lime Cement.” The state of New York purchased White’s patent rights for the public in 1824.



New York & Rosendale Cement Co.: the Black Smoke Mine.
Photo provided by Century House Historical Society, Jeff Kraus Collection

The surge in use of American natural cement also is attributable to the 51 Third System seacoast fortifications built after the War of 1812. These fortifications were devised to prevent another British invasion of the United States. The construction efforts — trial, error and testing — by the U.S. Army Corps of Engineers were, literally, the cutting edge of the technology in the United States.

Werner says that by the 1830 the use of natural cement in the United States had caught on because it was the only cement being made in America.

Masonry restoration expert Ken Uracius reports: “There is no doubt that natural cement was the binder of choice during the 19th century, not only in fortifications and lighthouses, but also in almost all engineered buildings and structures.”

Mike Tate, technical manager for research and development for Graymont Inc., points out that natu-

ral cement served a need at the time because it allowed construction to proceed more quickly in wet or dry situations. Lime-based mortars, because they weren’t as strong and strengthened more slowly, allowed you to lay only so many courses before you had to wait for those courses to strengthen before proceeding, he explains.



New York & Rosendale Cement Co.: at the top of the kilns.
Photo provided by Century House Historical Society, Jeff Kraus Collection

As it turns out, historically and technically, American natural cement was a transition material between older lime-based mortars and modern portland cements. “Natural cement sped up construction, but it didn’t last long,” Tate observes.

Nonetheless, during its heyday, natural cement was used in masonry mortars, stuccos, concretes, grouts and whitewashes. And besides more than 150 canal systems and 51 Third System forts, it was used to build numerous structures, including the Brooklyn Bridge, a dozen state capitol buildings, the U.S. Capitol, the lower 150 feet of the Washington Monument, the Statue of Liberty pedestal, and various museums and government buildings.

By the early 20th century, portland cement dominated the cement binder market. John Wathne, president of Structures North Consulting Engineers

Inc. in Salem, Mass., reports: “This was in part due to the fact that it could be manufactured virtually anywhere

that limestone existed, and to the fact that its cured properties surpassed those of natural cement.”

Tate says inconsistency was part of natural cement’s downfall. “It was hard to control the quality of natural cement; some were very hard, some very soft.”

Portland cement could be manufactured very consistently, and it had other advantageous properties as well, such as higher compressive strength. “The cement industry convinced architects and the construction industry that harder was better, and that they could build faster and taller.”

Nonetheless, the demise of American natural cement was a long, slow process. The last natural cement manufacturing facility in the country, the Century Cement Co. in Rosendale, N.Y., closed in 1970. The ASTM C 10 Specification for Natural Cement was discontinued in 1978.

The re-emergence of American natural cement

Flash ahead some 25 years and natural cement is being rediscovered, thanks to the increasing need for restoration and conservation work on structures built in the 1800s. “Masonry repairs of historical buildings using incompatible mortars are decaying and falling apart,” Werner says. “People are asking, ‘Why?’”

Restoration architect Mary Katherine Martin stresses the importance of analyzing historical mortars and restoring historical structures with like materials. “Why would you go to the trouble of using something that could be potentially harmful when you can use appropriate materials?” American natural cement has specific qualities that work with the massive historic structures it was used for, primarily its bonding properties and its flexibility to handle settling and expansion-contraction forces it is subject to.

John Walsh, senior petrographer at Testwell Laboratories in Ossining, N.Y., cautions that conservation and rehabilitation people should be aware that many mortars were used in the United States, and they should be careful in making assumptions about materials used. Fortunately, historic material testing is available from a few select labs in the U.S. — even mortar analysis at the microscopic level to ensure an acceptable level of compatibility.

Recent interest and emerging demand for American natural cement has now restarted the industry.

A few years ago, Ken Uracius obtained some cement rocks from the Rosendale area and, in his garage (which he nearly burned down in the process), experimented until he devised a method to burn and produce small batches of natural cement. Since then, commercial production of Rosendale natural cement has begun again, but it is a boutique product at this point.

Still, the demand for historically accurate natural cement caused ASTM Committee C01 to begin reevaluating the standard for natural cement in 2004. The standard, C 10-06, was reissued in October 2006. These specifications make it easier for individuals involved in restorations using natural cement to ensure they are using appropriate materials.



Bent Mikkelsen, Publisher

Editor’s note: The forgoing article was published in the Spring 2007 issue of *Traditional Masonry Magazine*. *Traditional Masonry (TM)* also publishes a on-line version [www.traditionalmasonry.com] of the magazine with past issues archived. The magazine’s states its mission as follows: “*TM* magazine is dedicated to the restoration and preservation of historic masonry structures. In its pages you’ll find articles on topics ranging from specifying traditional materials to cleaning masonry surfaces, as well as a look at the latest products, tools and techniques. Restoration case studies complete with beautiful photography will spotlight the contractors, architects and manufacturers involved in each project. *Traditional Masonry* is a must-read for architects, specifiers, preservation agencies, restoration contractors, and everyone involved in preserving these beautiful and invaluable links to our past.” *TM* is published in Eugene, Oregon by Professional Trade Publications they also publish *Concrete Decor* and *PaintPRO* magazines.

YOUR DONATIONS ARE NEEDED FOR THE TREASURE BAZAAR THRIFT SHOP

HELP US MEET THE FUND RAISING GOAL SET AT \$3000!

On weekends including during the Rosendale Street Festival (July 21 + 22), the Society will be holding the Treasure Bazaar Thrift Sale at the Rosendale Wares store front at 416 Main Street. Hours are Saturdays and Sundays noon – 4.

Already stocked with a riot of goods, your donations are needed to replenish the items that shoppers have already given new homes.

Decorative items, kitchen ware, good books, linens, jewelry, fancy flower pots and the unusual sell best. Unique clothes such as shawls, scarves and hats are welcome. No appliances please.

One gentleman loaded up with items needed to decorate a scene being shot in an old New York City basement for a movie starring Leonardo DiCaprio and Kate Winslet. Another exclaimed his quest for an antique kitchen tool was now finally over!

Just plain clutter sells too! The need for discovery can be satisfied with the “fill a bag sale” reserved for those items that only collectively create a thrill.

Volunteers sorting the treasures have been delighted to see many hot sellers including a yellow china tea set with a Japanese motif, a wedding white quilt with lace border, pearl earrings and enamel ware pieces. An extensive collection of science fiction books and recent novels donated will provide for many months of reading pleasure.

For our creative members (and the Society is blessed with many of them), consider a donation of art work, fancy aprons or something that reflects your talents.

Drop off your treasures at the store during weekend hours (and do some shopping as well) or call 658-9900 to arrange other times or pick-up. The fair market value of your donation is tax deductible.

Please help the Society realize the goal that has been set of raising \$3000 at the Treasure Bazaar.

Your donations “WILL MAKE HISTORY”!

OLD FASHIONED ICE-CREAM SOCIAL

SUNDAY AUGUST 5 1 – 4 pm

Extra Wild Fun: Make Your Own Hat!

Get your tickets NOW for the Old Fashioned Ice-Cream Social to be held on the spacious grounds of the Snyder Estate.

Homemade toppings for every taste from summer strawberry to the exotic balsamic cherry.

Special fun this year will be hat making for little folks and big folks. Everyone will carry away a splendid hat of his or her creation. Have some wild fun delving into the boxes of papers, ribbons, and crazy stuff to select just the right decorations. A group picture will be taken so we can all remember the fun for years to come.

Here is what you can do to make the Century House Historical Society Ice-Cream Social the grand event of this summer:

1. **INVITE** friends and family. Tickets are available now.
2. **VOLUNTEER** to help at the ice-cream table and Happy Hats area.
3. **DONATE** scissors, staplers, papers, buttons and decorative supplies.

Contact the Society today and let us get the excitement going!



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CENTURY HOUSE HISTORICAL SOCIETY

EVENTS

Come visit us at the Society's

TREASURE BAZAAR THRIFT SHOP 416 Main Street Sat & Sun noon to 4

Rosendale Street Festival

July 21-22

OLD FASHIONED ICE-CREAM SOCIAL

at A.J. Snyder Estate

SUNDAY AUGUST 5 1 - 4 pm

HUDSON VALLEY SUBTERRANEAN POETRY FEST

at A.J. SNYDER ESTATE

August 11 & 12 noon to dusk

TAIKO MASALA

Widow Jane Mine

September TBA