

Lime Kilns

by Karl H. West, Jr.



Lime Kiln at Bolton, Massachusetts.



Bottom opening of Lime Kiln at Walpole, Massachusetts.



Well near kiln at Walpole, Massachusetts.

■ Karl West is surely one of our "Old Dependables" who finds a wide variety of subject matter with which to pique our interest.

Hopefully, by now, many people have read Volume II of the *Colonial Williamsburg Historic Trades*. The article "Dissertation on the Nature, Properties and Uses of Lime" in that issue did an excellent job of describing the operation of extracting lime. Readers might be interested to learn that there are at least two of the 18th Century lime kilns still in existence.

In Bolton, MA, on Route 117, a lime kiln has been restored and gives a good idea of the size of the kiln, the ramp leading to the top and the opening at the bottom used to fire the kiln. Nearby, along a nature trail, one comes to the quarry. It is not a mine, but rather the side of a rock cliff, that has been broken away and transported in pieces to the nearby kiln. This limestone is Boltonite, which is white and smells of sulphur when cracked open. The only other place the material is available is near Mt. Vesuvius in Italy.

In Walpole, MA most of an unrestored 18th Century lime kiln is available to be seen off of Lincoln Rd. Although it is unrestored, it is interesting to see the smooth cylindrical walls, about 15 feet high, constructed of field stones without mortar. It is about 12 feet in diameter. The large opening at the bottom of the kiln is still intact, but there is no evidence at Walpole or Bolton of another opening on the side as shown in the picture accompanying the Williamsburg article. The fire is fed only through the one opening at the bottom, from which also, the lime is pulled out after the collapse of the internal burning or melting rock pile. Adjacent to the opening there is a well lined with field stones. The well appears to be necessary, due to the danger of fire from the lime. Nearby is another pile of rocks and due to the proximity of a well, it is assumed that a second kiln was there at one time.

While examining the Bolton kiln, I asked where the well was located. The guide did not know of any well. After searching around

in the nearby underbrush, I was able to find the depression which had evidence of being the required well.

At the Walpole site, adjacent to the ramp leading to the top of the kiln, is a noticeable depression, long overgrown with trees. I am sure this is where the soil was taken from to build the ramp. There is another large depression in the ground, near the "mine" or rock face. This was no doubt the remains of the hovel that the workers lived in while firing the kiln for the several required days.

The limestone rock from which the lime comes is an outcropping, probably 30 feet high and 100 feet long. The rock is split into vertical slabs and then broken into pieces about head size to transport to the kiln. Earlier, rock outcroppings closer to the kiln and maybe of better quality were mined. Evidence of cut faces show on these rocks, but based upon the size of the slow growing cedar trees along the faces, I'm sure these rocks were abandoned a long time ago. Around all of the rocks, ferns grow abundantly, due to the condition of the soil saturated with lime.

Regarding the rock itself, it does not appear to be the white stone we know as limestone, but rather looks like a granite cliff. However, in 1833, Edward Hitchcock writing on the *Geology, Mineralogy, Biology and Zoology of Massachusetts*, states "On the south side of Boston at Walpole in the west part of town, is a bed of limestone of a gray color and stratified with impurities. It would, however, make good lime; and indeed, it was burnt in considerable quantity some years ago." It is known as Graywacke Limestone.

Additional information that I have found is that in 1697 limestone was discovered in Newbury, MA. Previously, sea shells were used in colonial buildings needing lime. From the quarry, 30 teams a day carried away the limestone. The Portland Cement Association reports lime kilns such as the Walpole type are still standing at the Saylor Park Cement Industry Museum, near Allentown, PA. Searching the Economic

and Social History of New England I found there was a lime kiln near Bowling Green as early as 1723. In 1724, lime was selling for 1 shilling per bushel. In 1738, it was selling for 1 pound per hogshead. In 1776, Rhode Island kilns were shipping hogsheads from Providence to Boston. Lincoln, RI still has the remains of one of its kilns. In 1778, lime was selling at \$30.00 a hogshead. New York had a lime kiln, which you might realize as you pass Lime Kiln Rd. on Route 84 in the eastern part of New York. The remains of the kiln are in East Fishkill on Lime Kiln Rd. south of Route 84 against the side of a hill, where the high tension wires cross the road. It was operated in the early 1800's.

For general information about the lime industry in Maine, primarily from sea shells, the April, 1931 issue of *Old Time New England* is quite enlightening. This article describes the danger from combustion and the fires that burned the ships to the waterline, as they carried lime from Maine to Boston.

REFERENCES

1. *A Story of Lime* by Dr. Victor Johnson, Muhlenberg College 1948. (Available at Lehigh Museum).
2. *Cooking Charcoal Down In Rattlesnake Gutter* by Rob Willmington, *Yankee* magazine, Dec. 1979.
3. *Down East* magazine (dates unknown) "Lime Kilns At Rockport".
4. Lehigh County Historical Museums, PO Box 1548 Allentown, PA 18105.
5. "The Old Rockland Maine Lyme Trade" by George Wasson *Old Time New England* published by Society for the Preservation of New England Antiquities.
6. *Geology, Mineralogy, Biology and Zoology of Mass* by Edward Hitchcock, 1833 Amherst, MA.



Editorial

Charles Reichman's interesting look at Long Island tool makers (see Gleanings) reminds us that we very much want to offer

more local and regional studies, not only like his which deals with a particular region's experience of an industry that was practiced everywhere, but also exploration of activities that were confined to specific areas as: cane sugar making in the South, gold mining in the West, salt refining in upstate New York or big-tree lumbering in Washington State. If your home town was the pencil-making center of the world, why don't you tell us all about it?

Officers and Directors of EAIA

Daniel J. Comerford* President
James M. Gaynor* First Vice President
Carl E. Bopp* Second Vice President

Directors

Michael Beresford Marion Ludwig
Lawrence N. Brundage* David L. Parke, Jr.
Quentin F. Callahan J. Francis Pfrank
Victor Cole Daniel B. Reibel
Eugene Fox Ivan C. Risley*
Charles F. Hummel Elliot M. Sayward
Arlene Kendra Charles H. Shaw, Jr.
Robert Kendra Frank G. White
Gene Kijowski

* Executive Committee

John S. Watson Treasurer
Wadie deFrancisco Secretary
Alan G. Bates* Executive Director

Committee Chairpersons

Budget and Finance David V. Englund
Library Committee Eugene Fox
Meeting and Program Alan G. Bates
Publications Elliot M. Sayward
Whatsit Committee Ivan Risley
Grants-in-Aid Charles F. Hummel
Shavings Daniel Reibel
By-Laws Daniel M. Semel
Tool Directory Project Gene Kijowski
Publicity Committee Arlene Kendra
Membership Charles Shaw
Lawrence N. Brundage



| | |
|---|----|
| Letters to the Editor | 34 |
| The Solid Center Auger Bit | 35 |
| James E. Price | |
| The Way It Used To Be | 36 |
| Luther and Joseph Metcalf | 37 |
| Bennett Blumenberg & Dale J. Butterworth | |
| Tools Of The Quilter | 39 |
| Sharon Ogden | |
| Famous Spiller Axe Family | 40 |
| Allan Klenman | |
| Sawing Through The Grit | 41 |
| Larry Brundage | |
| The Match Holder | 43 |
| Mary Jane Sayward | |

| | |
|---|----|
| Taming The West With | 44 |
| Electrical Power Charles R. Wright | |
| Lime Kilns | 46 |
| Karl H. West, Jr. | |
| Whodunit? | 47 |
| Around The House | 49 |
| Chips And Sawdust | 53 |
| Forge, Foundry, Machine Shop & Mill | 53 |
| The Delectable Collectible | 54 |
| Test Your Tool Knowledge | 54 |
| The Wareroom | 55 |
| Ledger Domain | 57 |
| Gleanings | 58 |
| Whatsits | 60 |

LETTERS to the Editor



"The Band Setter" by Len Borkowski (Dec. 1990) and "The Band Setter Revisited" (March 1991) continue to generate mail. We (Len and your editor) have heard from Merrill Norton, Dan Semel, Bob Nelson, Francis Pfrank, Judy Kombluth, Roy Schaffer and Jim Price with cogent comments. Perhaps other writers have not yet been recorded. Hopefully further information can be distilled both from these letters and Len's continuing research to provide another piece in a later issue. In the meantime, our thanks to all of our correspondents. - ED

To The Editor:

The letter in the March 1990 issue of this column, contained a mention of a pair of parallel jaw pliers and the possibility of their having a specific use. That letter made me rethink parallel pliers and offer a thought and question. I have and use a pair of such pliers which I obtained second-hand many years ago. They are painted black and come with a single set of wire-cutting jaws and a semi-circular channel running the length of the center of one of the jaw faces. The channel is about one-sixteenth inch in diameter. The pliers have no maker's mark, but stamped into one of the handles is a circular cartouche which says, "ARMEE FRANCAISE 41P 1992-006". I have always

continued on page 38

The Chronicle

of the
Early American Industries Assn., Inc.®

Vol. 44 No. 2 June 1991

(ISSN 0012-8147)

Editorial Staff

Editor: Elliot M. Sayward
Contributing Editors: Charles Reichman
Frank G. White
Charity Gedney
Research Editor: Larry Brundage
Editorial Assistant: M.J. Sayward
Special Assignments: Richard Kappeler

Address Editorial Communications to:
60 Harvest Lane, Levittown, NY 11756

The Chronicle of the Early American Industries Association is published quarterly by the Early American Industries Association Inc., (J. Watson, Treas., P.O. Box 2128, Empire State Plaza Sta., Albany, NY 12220). Second class postage paid at Albany, NY and additional mailing office. POSTMASTER: send address changes to "The Chronicle of the Early American Industries, Inc.," c/o J. Watson, P.O. Box 2128, Albany, NY 12220.

Make membership inquiries to J. Watson at above address.

Purpose: The purpose of the Association is to encourage the study of and better understanding of early American industries in the home, in the shop, on the farm, and on the sea; also to discover identify, classify, preserve and exhibit obsolete tools, implements and mechanical devices which were used in Early America.

Copyright 1991 by the Early American Industries Association Inc. USPO Publication No. 560-02.

ASSOCIATED ORGANIZATIONS

Mid-West Tool Collectors Association
Gale Zerkle, President
511 Cookston Avenue
Springfield, Ohio 45503

Southwest Tool Collectors Association
Troy Marshall, President
27126 Glencreek
Huffman, TX 77336-1704

Three Rivers Tool Collectors
Robert Kendra
39 S. Rolling Hills
Irwin, PA 15642

ABOUT OUR FRONT COVER

Shown are two scythestone makers splitting out blanks for individual stones. See *Sawing Through The Grit*, page 41. Picture is from an early Pike Co. advertisement.

An old Sturbridge Village photograph
by Henry E. Peach.