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"Two remarkable finds from the Dominy shop: a Dominy gauging and wantage rod; a Dominy family agricultural/textile tool," from The Chronicle of the Early American Industries Association. Volume 58, Nu...

Bopp, Carl; Hummel, Charles F.

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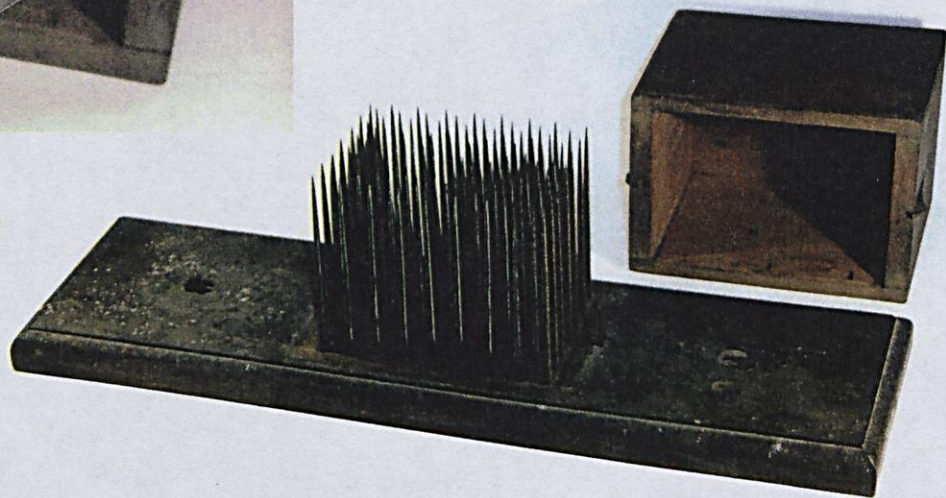
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The CHRONICLE

of the
Early American Industries Association



Two Remarkable Finds from the Dominy Shop

A Dominy Gauging and Wantage Rod • A Dominy Family Agricultural/Textile Tool

Thomas Jefferson's First Threshing Machine

A Plane that Bears the Imprints of Two Manufacturers:
The Union Factory and The Phoenix Company

How Much is that Rabbet in the Window?

The Bear Mill

Two Remarkable Finds from the Dominy Shop

A Dominy Gauging and Wantage Rod

by Carl Bopp

Thirty-seven years have passed since *With Hammer in Hand, The Dominy Craftsmen of East Hampton, New York* by Charles F. Hummel was first published.¹ In that ground-breaking book, Charles told about three generations of Dominy craftsmen (from circa 1760 to 1840) who primarily made furniture and clocks for a living. Illustrated in the book are other articles made in the Dominy shop for family use, such as a wooden bowl made of a burl from an apple tree and a swift to wind wool yarn. For tool collectors, the book is a treasure trove, as it documents the largest collection from one source of mid-eighteenth to mid-nineteenth century tools, patterns, and shop equipment that exists to this day.² The Dominys bought or bartered for some of the tools in their shop, but a large number, including planes, spokeshaves, bevels, and marking gauges, they made themselves. To many of us, *With Hammer in Hand* is like a tool encyclopedia to be read over and over again.

It's surprising, however, that in all these years since the book was published, very few other tools that could be attributed to the Dominys have become known. Recently, a hatchel made by one of the Dominys

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A Dominy Family Agricultural/Textile Tool

by Charles F. Hummel

Like so many craftsmen working in rural areas of colonial America and the New Republic, the Dominys of East Hampton, New York, also owned and derived income from a hundred-acre farm.¹ Thanks to EAIA members Carl Bopp and Ken Hopfel, I received an early holiday treat in December 2004. A hatchel bearing the date 1822, the initial "ND" in a rectangle, and "Dominy" in a serrated edge rectangle was brought to Wintthur for examination and photography (Figures 1, 2, and 3).

During their productive lifetimes, Nathaniel Dominy IV (1737–1812), Nathaniel Dominy V (1770–1852), and Felix Dominy (1800–1868), made quantities of agricultural tools and equipment. Prior to the appearance of this hatchel, no examples of agricultural tools attributed or documented to the Dominys' shop had surfaced. Given the fact that all of the tools bearing Dominy initials and/or stamps, plus dates, have been owned by one or more of the craftsmen, it is most likely that this hatchel was made for their family use.

By 1822, Nathaniel IV had been dead for ten years, and Felix Dominy was focusing on clock and watch work or other metalwork. This hatchel, therefore, was probably made by Nathaniel Dominy V. The name stamp,

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Figure 1 (right). A hatchel (also called hetchel, hackle) with its original cover, probably made by Nathaniel Dominy V for family use. Cherry, white pine, and iron, overall length: 20 inches (base); depth, $5\frac{7}{8}$ inches; height (to top of nails): $5\frac{3}{8}$ inches. Collection of Kenneth Hopfel.

EXCEPT AS NOTED ALL PHOTOGRAPHS CHARLES HUMMEL.

Figure 1. A gauging and wantage rod made by Nathaniel Dominy IV in 1763. Photograph courtesy The Independence Seaport Museum, Philadelphia. Gift of Philip Allen, ISM 90.34.

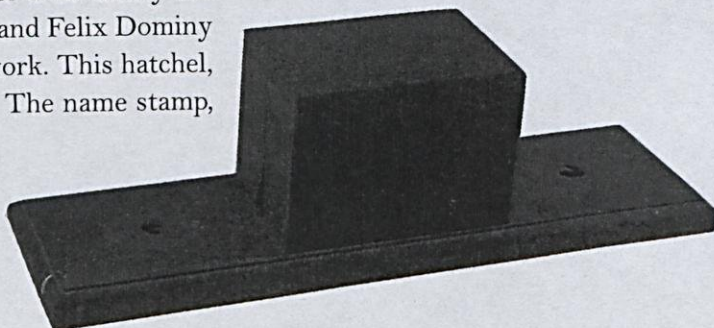
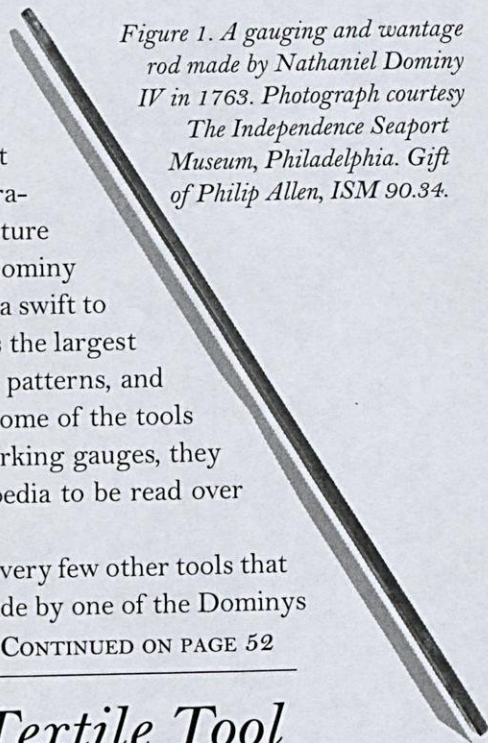
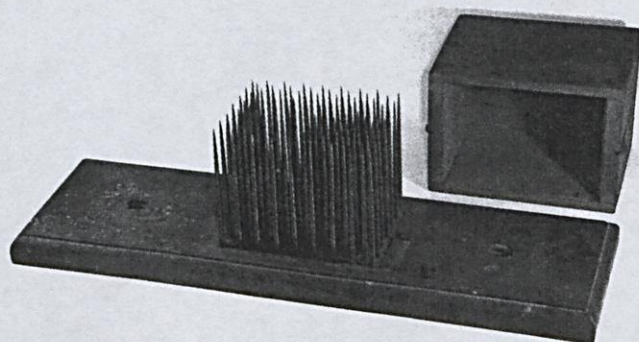




Figure 2. Initial stamp "ND" used by Nathaniel IV and V and the date "1822" inscribed on one end of the hatchel (top) and DOMINY name stamp (bottom) used by Nathaniel Dominy V. See also illustrations on front cover.

Figure 3 (below). Hatchel with cover removed. The threaded holes in the board and the screw eyes to receive hooks are visible.



"Dominy" in a serrated rectangle, was used by that craftsman and his father's "ND" initial stamp was also available to him.

The hatchel board is made of cherry. It has two threaded holes bored through it that were intended to receive wooden screws. What is not clear is whether or not the board was intended to be fastened to another surface. Like so many early craftsmen, the Dominys saved bits and pieces of tools and wooden objects to be used later for other purposes. Given the careful layout of the nails or spikes (Figure 4) and the pride of ac-



Figure 4 (above bottom). The hatchel board underside. Note the measured arrangement of the spikes.

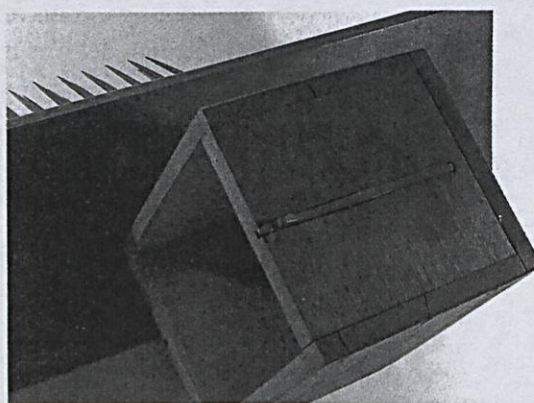
Figure 5 (right). The hatchel cover with iron hooks. PHOTOGRAPH: KENNETH HOPFEL.

complishment and ownership indicated by the date and name stamps on the board, it is highly probable that the board was intended to be fastened to another surface when in use. A white pine box fastened to the board with long, flexible, wrought iron hooks, provides a protective cover for the spikes (Figure 5). The birch molding plane used by Nathaniel V to make quarter round or ovolo molding on the upper edge of the hatchel board, however, was made by Nathaniel IV in 1768 (Figures 6-7).²

According to the *Oxford English Dictionary*, a hatchel is an instrument for combing out the fibers of flax or hemp. "Hatchel" is derived from the late fifteenth-century Middle English word, "hackle," probably meaning "to prick, pierce, stab." The same tools can also be referred to as a "hetchel."³ Although there are six references in Dominy accounts to this type of tool, only once in 1820, is it referred to as a "hackle."⁴ The earliest notation occurred in 1769 when Nathaniel IV charged two shillings-three pence for making "1 Hatchel Board." Nathaniel V charged four shillings-six pence in 1814, and six shillings-six pence in 1827, "To make Hatchel board and set teeth in Do [ditto]."⁵

The discovery of this hatchel provides a reminder of the importance of flax, hemp, and linen to not only the Dominy family, but to so many Americans of the colonial period through the mid-nineteenth century. In *A History of American Manufactures from 1608 to 1860*, J. Leander Bishop stated that in 1810, "It was probable that two-thirds of... cloth, including hosiery, house and table line, used by inhabitants outside of the cities, was the product of family manufactures."⁶ Victor Clark noted "Until 1810, the manufacture of flax was the best established and most widely distributed textile industry in the country; ...confined mainly to the household." In 1824, New York State alone manufactured 14,460,000 yards of homemade cloth.⁷

From 1936 to 1983, *The Chronicle* published articles or notes related to flax processing, linen production,

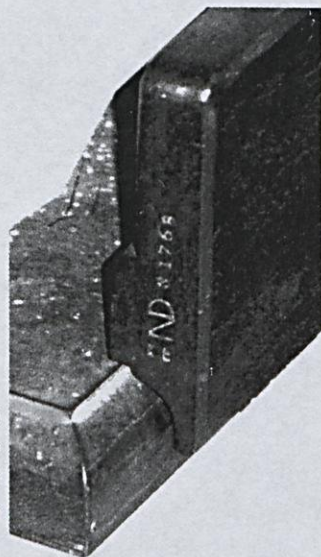
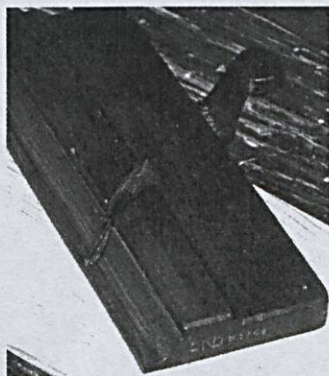


and related implements. The earliest articles, by William B. Sprague, a founder of EAIA, described the process of converting flax plants to fibers ready for spinning into yarn to be used for weaving into linen cloth.⁸

Part of the quality of life enjoyed by the Dominy family is revealed by entries in their accounts. On the credit side of Nathaniel IV and V's ledgers, a partial listing shows customers paying them as follows:

by Flax seed to sow [1785]
by 8 1/3 lb. of flax at 9d [1770]
by Carting out Flax [1785]
by 41 lb. Of flax [1810]
by do [weaving] 21 yds of Linnen [1770]
by weaveing 13 [yds] of Chek linen [1770]
by weaveing 34 1/2 yds [of linen] in 36 Reed [1785]
by weaveing 20 yds of Linen in 35 Reed [1790]
by weaveing 14 1/2 yds of chek linen [1790] by 27 yds linen 34 Reed [1810]⁹

The owner of the Dominy hatchel obtained it from an antiques shop in Silverdale, Pennsylvania. Silverdale is a small community on Route 309. The dealer from whom it was obtained and its owner readily admit that they hadn't a clue about the significance of the Dominy name stamped on the hatchel board. As noted above, if not for Carl Bopp being at a tool collectors' gathering where the hatchel was brought to his attention, this evidence of the Dominys' production of agricultural tools and equipment might still be hidden. During their productive years, Nathaniel IV and V made three plow frames, three "great" or "large" harrows, three ox yokes, a greater number of neck yokes, three dung fork handles, sixteen pitch fork handles, thirty-five grain cradles, and



Figures 6 and 7. The Dominy birch molding plane (above) used to make quarter round or ovolo molding (right) on the upper edge of the hatchel board is in the collection at Winterthur.

one hundred and twenty wooden rakes. These figures do not include the extensive number of repairs they made to agricultural tools and equipment.

How did this hatchel, made for family use, get to Silverdale, Pennsylvania? Dominy descendants moved to upstate New York, Ohio, and points west, but not to Pennsylvania. Prior to their purchase by Winterthur in the 1960s, the tools were on loan to the East Hampton Historical Society. On numerous occasions, this writer has been informed by East Hampton residents that when it became known that the collection would be sold, a process known in military circles as "midnight requisition" took place. If so, one can be hopeful that in the future, other examples of the Dominys' handiwork will come to light.

Notes

1. Charles F. Hummel, *With Hammer in Hand, The Dominy Craftsmen of East Hampton, New York* (Charlottesville: University Press of Virginia, 1968), 216-217, fn 4.
2. *Hammer in Hand*, Figure 78D, 113-114.
3. *The Shorter Oxford English Dictionary* third edition, revised by C.T. Onions (Oxford: Clarendon Press, 1952), 851, 871.
4. Account Book, 1809-1862, Nathaniel V, Felix, and Nathaniel Dominy VII. Joseph Downs Manuscript and Printed Ephemer Collection, Winterthur Library, Microfilm 310, p. 402. Original, East Hampton Free Library, Long Island Collection.
5. Account Book B, 1762-1844, Nathaniel IV and Nathaniel Dominy V. Downs Collection 265, MS.59x9a, 9, 18, 32, 33, 60.
6. *A History of American Manufactures from 1608 to 1860*, II, (Philadelphia: Edward Young & Co., 1866), 150.
7. *History of Manufactures in the United States I*, reprint of 1929 edition (New York: Peter Smith, 1949), 325, 439.
8. William B. Sprague, "Flax Dressing by Hand," *The Chronicle* 1, no. 17 (1936): 1, 3 and *The Chronicle* 1, no. 18 (1936): 4, 6. See also other articles or notes, *The Chronicle* 1, no. 20 (1936): 4; *The Chronicle* 2, no. 12 (1939): 89, 91; *The Chronicle* 2, no. 13 (1940): 97, 100-101; *The Chronicle* 2, no. 21 (1942): 188; *The Chronicle* 3, no. 11 (1947): 93, 94, 98-99, 101-102; *The Chronicle* 36, no. 4 (1983): 76, 82.
9. Appendix B, *With Hammer in Hand*, 355-357, 371-372, 381, 393, 400.

Author

Longtime EAIA member Charles F. Hummel is an adjunct professor of art history at the University of Delaware and curator emeritus of the Winterthur Museum. He is the author of *With Hammer In Hand: The Dominy Craftsmen of East Hampton, New York*, among other works.

GAUGING AND WANTAGE RODS.



No. 45 Gauging Rod is graduated in Wine Measure up to 120 gallons on one side, and in inches and parts of inches on the other side.

DIRECTIONS.—To ascertain the capacity of a barrel, insert the rod in the bung-hole in a slanting direction to the chime, note point on the rod which comes exactly in the middle of the bung hole, on a line with the under side of the stave; then reverse the process, running the point of the rod to the chime at the other end of the barrel; and if the bung-hole is exactly in the middle of the barrel, the result will be the same as before, and the capacity of the barrel will be shown. If the measurements differ, add them together and divide by two, and you have the number of gallons the barrel will hold.

No. 45. Gauging Rod, 120 Gallons, 3 Feet. each, \$0.60
 No. 45½. Gauging Rod, 180 Gallons, and Wantage Tables, 4 Feet. " 70



No. 44 Wantage Rod has 8 Tables, or Lines, for Barrels of 16, 23, 32, 42, 48, 84, 110 and 120 Gallons.

DIRECTIONS.—Having found the capacity of the barrel by use of the gauge rod, insert the wantage rod perpendicularly in the bung-hole, holding it so that the brass lip points toward the head of the barrel; lower it slowly until the lip comes just under the inner side of the stave, then withdraw it, being careful not to let the rod go any further into the barrel; and the mark where the rod is wet, on the line which has the full capacity of the barrel at the top, shows the number of gallons that are wanting to fill it.

No. 44. Wantage Rod, 8 Lines each, \$0.50
 No. 37. Wantage Rod, 12 Lines " .60

Examples of gauging and wantage rods from Montgomery & Co. tool catalog (New York), circa 1895. Although this catalog was published more than a hundred years after the Dominy rod was made, the "directions to ascertain the capacity of a barrel" are identical. At the time of the publication of this catalog, there were also separate wantage rods (numbers 44 and 37 in the catalog) available.

DOMINY GAUGING ROD CONTINUED FROM PAGE 49

was found. Charles Hummel describes that tool in this issue of *The Chronicle*. When I examined this hatchel with Charles, I was reminded that there was another great Dominy tool at the Independence Seaport Museum in Philadelphia.³

That museum has in its collection a gauging and wantage rod that was made by Nathaniel Dominy IV in 1763 (Figure 1). This tool was given to the Philadelphia Maritime Museum (the predecessor to the Independence Seaport Museum) in 1990 by a museum volunteer, who said he had had it for years and didn't remember where he had gotten it from.⁴

This gauging rod is a four-sided stick 40⁵/₈ inches long. It is ³/₄ inch square at one end and tapers to about ³/₈ inch square and then to a flat point that is brass bound at the other end. The museum lists it as "probably cherry" wood and describes it as follows:

Inscribed with three scales, one on each side and fourth side has wantage table. #1 – Inches scale to 36"; #2 – scale for wine to 160 gallons; #3 – scale for beer to 120 gallons; #4 – wantage tables break down into table for Hogshead 108 W (wine) gallons; tirs (tierce) of wine 64 gallons; barrel of 32 gallons.⁵

The museum accession card also notes:

the stick has two scales; one for beer and the other for wine [Figure 2] because they were measured by different sized gallons until c 1810–20, when the British standardized the measures. The stick also has a series of tables –known as wantage tables to measure what the barrel 'wants of being full' or what is missing.⁶

The most incredible thing about this tool is its inscription. Taking up a space of 12¹/₂ inches is this engraving:

1763 xxx Made By Nath^l Dominy y^e 3^d Eaf-
 thampton Long I^land x for Cap^t Nathaniel
 Baker Sep^t y^e 19th AD 1763 x.



Figure 2. A detail of the Dominy gauging rod showing part of the wine scale. Photograph courtesy the Independence Seaport Museum, Philadelphia. Gift of Philip Allen, ISM 90.34.

Y^e 3^d *Made By Nath^l Dominy y^d Easthampton Long Island x for Cap^t Nathaniel Baker Sep^r 19th AD 1763x

Figure 3. The engraving on the Dominy rod (top) and drawing of the inscription (bottom). About 227 years have elapsed from the time this tool was made and the photograph was taken. Time had substantially darkened the wood making it difficult to read.

PHOTOGRAPH COURTESY THE INDEPENDENCE SEAPORT MUSEUM, PHILADELPHIA. GIFT OF PHILIP ALLEN, ISM 90.34.
DRAWING COURTESY TOM LAMOND.

(Note that the first 1763 is sideways to the rest of the inscription and under it are three touch marks. See Figure 3.) Nathaniel abbreviated his own first name but showed respect to the captain, who had the same name, by spelling out his name in full. (Note also the use of the Old English long “S” where “f” is used to represent the long “S.”) This gauging and wantage rod has been confirmed to have come from the Dominy shop. The Winterthur Museum has in its Dominy collection, some of the original die stamps used to mark the scales and measurements on it.

This tool is dated three months earlier (September 19, 1763) than the oldest dated Dominy tool, a smoothing plane dated December 25, 1763. (The plane is illustrated in *With Hammer in Hand*.) Both of these tools and a book, *The Mariner's New Calendar* (London 1761), owned by Nathaniel share similar wording on them. The plane, made of satinwood, is marked, “Nathaniel Dominy / Y^e 3^d Joyner [owner?] Decem^r / Ye 25 th AD 1763.”

Charles points out in *With Hammer In Hand*, “Like other Presbyterians of the period, it was business as usual for Nathaniel Dominy on Christmas Day, with no observance of a holiday. Instead he spent it finishing this plane.”⁸ On the inside cover of *The Mariner's New Calendar*, Nathaniel wrote, “Nathaniel Dominy Y^e 3^d / His Kalender Bought of M^r Bird at / New Port June ye29th AD 1762/ Price 5[£] old Tenner.” Charles notes that “Nathaniel IV used the designation “Y^e 3^d” because both his grandfather, Nathaniel II, and father, Nathaniel III, were still living and using the designations of senior and junior.”⁹

Nathaniel Baker III, for whom the gauging rod was made, was from a well-known Easthampton, Long Island, N.Y., family. His father was Thomas Baker II. Nathaniel was baptized December 24, 1699, and he married Sarah (Ludlow or Ludlam) on November 16, 1721. He inherited his father's property when his father died in 1735. Nathaniel's wife died in 1768, and he died January 14, 1772. He was referred to in Easthampton

records as “Capt.” or “Esq.”¹⁰

Nathaniel Baker was a customer of the Dominys. Entries in the Dominy's account book list things that he bought from them. Unfortunately, his entries start in Book B in 1767. Earlier entries, including 1763, would have been in Book A, which has never been found.¹¹

From the wording on this gauging rod, I believe that it was a presentation piece, given to the Captain, rather than something that was sold to him. In either case, this gauging rod is a rare find. It, and the hatchel that was recently found, should remind us to keep an eye open for what else might be out there from the Dominy Shop.

Notes

1. Charles F. Hummel, *With Hammer in Hand: The Dominy Craftsmen of East Hampton, New York*. (Charlottesville, Virginia: The University Press of Virginia for the Henry Francis du Pont Winterthur Museum, 1968).
2. The Dominy reconstructed clock and woodworking shops, along with a very large collection of original tools, patterns, shop equipment, and products from the Dominys, are displayed at the Winterthur Museum, Winterthur, Delaware.
3. Independence Seaport Museum, Penn's Landing Waterfront, 211 S. Columbus Blvd., Philadelphia, Pa. The gauging rod is presently in storage.
4. Accession card no. 90.34, Independence Seaport Museum.
5. Ibid.
6. Ibid.
7. Hummel, 124, figure 92.
8. Hummel, 123.
9. Hummel, 20.
10. Jeannette Edwards Rattray, *East Hampton History, Including Genealogies of Early Families* (Garden City, N.Y.: Country Life Press, 1953).
11. Letter to the author from Charles F. Hummel, January 7, 2005.

Author

Carl Bopp occasionally writes about tools made in Philadelphia for *The Chronicle* in his column “Made in PHILADA” In this issue, he has taken a different approach and written about a tool that is in a museum in that city.