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English Tools in America: The Evidence of the Dominys

CHARLES F. HUMMEL

During the seventeenth and eighteenth centuries, as well as for at least half of the nineteenth century, American craftsmen depended upon English manufacturers for most of their tools. Without them, the American artisan would have been severely limited in his production. It might appear that exports by the English tool industry restricted the American market of other manufacturers; a market existed, however, for all goods in the expanding economy of the New World. There was ample demand for articles produced abroad, as well as in America, and export of such finished goods as tools was consistent with English mercantile theory and practice.

There were, of course, craftsmen working in America whose specialty was making tools for artisans. Although they were never great in number, their products must be considered in order to place in perspective both the importation of English tools and examples from this trade at Winterthur which were used by the Dominy family. Toolmakers working in America usually were immigrants who had learned their craft in England. When Samuel Bissel, an anvilsmith, placed an advertisement in the *Boston Gazette*, March 4, 1717, he thought it important to note that he was "lately come from England." Bissel's notice that he was making "all sorts of Black-smiths and Gold-smith's anvils, Brick irons and stakes," as well as putting "new Faces" on old ones at his shop in Newport, Rhode Island, is among the earliest references to the production of tools on these shores.¹

New York City in particular attracted a number of toolmakers during the eighteenth century for reasons as yet unknown. Perhaps an important factor was the convenience of iron and steel from furnaces in the city. Newspapers of the eighteenth century reveal the extent of tool manufacturing. In 1748 George Appleby, a blacksmith, advertised the making of axes "after the best Fashion" as well as "all Sorts of Edge Tools." Thomas Yates, "Brass Founder, and Copper-Plate Printer, from Birmingham," noted in 1759 that he made "small steel and Iron Tools for Cabinet-Makers, Carvers, Silver Smiths and Engravers." In 1771, Lucas and Shepard, the partnership of a whitesmith and a cutler from Birmingham and Sheffield, maintained a shop "at the Fly-market, near the Ferry Stairs." Guaranteeing that their tools were all made in New York, they advertised,

¹ GEORGE FRANCIS DOW, *The Arts & Crafts in New England, 1704-1775* (Topsfield, Mass.: The Wayside Press, 1927), p. 252. See also the advertisement of William Bryant, a Boston blacksmith, pp. 256-257.

*double jointed plyers, steel pads [braces] with sets of bits; silver-smiths, braziers, and tinner's tools; turning lathes for any trade . . . , coopers vices, all sorts of gimblets, plane irons double and single center pins, . . . all sorts of carving tools and white smith's work.*²

Advertisements by toolmakers in the newspapers of New York during the post-Revolutionary period appear to be less frequent. A short notice in the *Columbia Gazetteer* of August 29, 1793, mentioned: "Screw Augers manufactured and sold by John Hull, No. 97 Queen Street, New York where his Friends and the Public, may be supplied with any quantity or size of the best warranted augers."³ The growth in both size and efficiency of the tool industries of Birmingham and Sheffield, beginning with the mid-eighteenth century, probably made it difficult for American manufacturers to compete with importers of tools. It is significant that the company of William Butcher, a large Sheffield firm exporting edge tools, did not find it necessary to register a trade-mark in the United States until 1872.⁴

Philadelphia, the largest and most important city in the colonies before and just after the Revolution, did not attract as many toolmakers as New York, but it did foster one specialty in tool manufacturing. The making of craftsmen's planes developed in Philadelphia during the 1760's. Through the apprenticeship system, as well as immigration, the city remained a center of plane production until the early nineteenth century.

The first local craftsman to come to the attention of Philadelphia artisans was Samuel Carruthers (also spelled Caruthers). His shop on Third Street, "the third door turning up from Church Alley, and a little above the Goal [sic]," was made conspicuous by a sign emblazoned with a handsaw and a carpenter's plane. An advertisement he placed in the *Pennsylvania Chronicle* for March 6, 1767, is important to the study of American technology because it helps date the introduction of an improved form of woodworking plane. Carruthers stated that among the carpenter and joiner planes he produced were "double-iron'd planes of a late construction, far exceeding any tooth planes or uprights whatsoever, for cross grained or curled stuff." It has been assumed that this type of blade (Fig. 3) was an innovation of the nineteenth century because it is common in planes and catalogues of that date, but the advertisement by Carruthers proves it was known by the mid-eighteenth century and was being produced by one of the progressive toolmakers of Philadelphia.

Although he was successful enough to attract at least one apprentice, Benjamin Armitage, Jr.,⁵ Samuel Carruthers had to supplement his income through the sale of imported tools. In the *Pennsylvania Chronicle* for January 18, 1768, he notified readers:

² RITA S. GOTTESMAN, *The Arts and Crafts in New York, 1726-1776* (New York: The New-York Historical Society, 1938), pp. 197-198, 200-201, 290. See also advertisements for the manufacture of tools by Elias Bonnell and Robert Farris, William Jasper, Bailey and Youle, and Thomas Smart, clock and watch filemaker, pp. 162, 198-200, 204.

³ RITA S. GOTTESMAN, *The Arts and Crafts in New York, 1777-1799* (New York: The New-York Historical Society, 1954), p. 259. See also the notice in 1782 of Nathan Beers "who undertakes to make and finish most edge tools," pp. 303-304.

⁴ WALLACE A. BARTLETT, *Digest of Trade-Marks Registered in the United States for Machines, Metals, Jewelry and the Hardware and Allied Trades* (Washington, D. C.: Gibson Bros., 1893), p. 161. The firm W. & S. Butcher registered three trade-marks: an anchor for use on files, a horizontal B in a circle, and a Maltese cross for edge tools and razors.

⁵ See his advertisement in the *Pennsylvania Journal*, August 26, 1772, in which he states that he "served a regular apprenticeship with Samuel Caruthers, of this City."

Samuel Caruthers, In Third Street, Continues to keep a general assortment of hard ware, particularly adapted to carpenters and joiners, also smiths, coopers, shoemakers, &c. A set of clock-maker's files to be sold together, . . . seven and a half steel plate pit saws, very well finished and the utmost care is taken to keep the very best saws of all denominations, of various makers; also there is, and is intended to be continued the making of all sorts of carpenters and joiners planes, with the usual care and fidelity . . .

N. B. Wanted beach [beech] wood, in bolts, also in scantling; ash wood, ditto, both for plane making and wood saw frames.

There is every indication that Carruthers made only the wooden parts of a tool. This procedure corresponded to that of English toolmakers. Although some complete planes are shown in English trade catalogues of the eighteenth and nineteenth centuries, they are exceptions. Most tools are illustrated without wooden handles or other parts. These elements would have been made and the parts assembled by craftsmen outside the tool factory.

At least fifty-seven types of planes were advertised by Thomas Napier, a "Plane Maker from Edinburgh," in the *Pennsylvania Mercury* for April 28, 1786. Napier boasted that he could make "any kind of planes . . . to drawing or pattern, to the greatest exactness; the charge according to the work in them." By 1788 there were at least nine plane makers at work in Philadelphia, a sufficient number to warrant them a place in the "Grand Federal Procession" of July 4. William Martin bore their standard with "a smoothing plane on the top; device, a pair of spring dividers, three planes, a brace, a square, and gauge. Motto: Truth."⁶ The advertising section of Paxton's *Philadelphia Directory* for 1819 indicates the production of planes for woodworkers continued to be a specialty in Philadelphia. William Grinnell placed a notice about his "American Plane" manufactory in back of 7 Filbert Street, and F. F. Kneass called attention to his "Plane Manufactory and Tool Store" at 10 South Eighth Street. In 1831 a Philadelphian claimed that "all the various edged tools for mechanics" were extensively made in his city.⁷

Although toolmakers worked in America, English tools were more common. There is evidence that craftsmen favored the imported tool for both economy and efficiency. A South Carolina craftsman, apparently a turner, stated his opinion of American tools in the *South Carolina Gazette* of July 1, 1732:

Taken out of Mr. Stone's House in Dorchester, about the 1st of September last, a parcel of Turning Tools, 2 Hand-saws, and Hammers, etc. The Turning Tools were made in this country, and are very clumsy, and may be known by that: the shanks of them is near 16 or 18 inches long, one of the Hand-saws is branded upon the handle R. Whoever can give any account of them, so

⁶ *Pennsylvania Packet*, July 10, 1788.

⁷ JAMES MEASE, *Picture of Philadelphia*, (Philadelphia: Robert De Silver, 1831), I, 74. Mease also states in this passage that British publications (unidentified) had reported a "capital improvement" in the manufacture of durable screw augers at Philadelphia.

as they may be had again, shall have £5 reward from James Rousham.⁸

The number of men making tools in Sheffield suggests the extent of production in England. The tool industry there, as in Birmingham, was highly specialized. The *Local Register of Sheffield*, compiled by John Thomas and published by Robert Leader in 1830, lists the number of these manufacturers in tracing the growth of the tool industry from 1797 to 1828 (pp. xxvi-xxix):

	1797	1821	1828
Anvil makers	4	3	4
Brace-and-bit makers		5	11
Auger makers		2	3
Awl-blade makers	4	7	
Edge-tool makers	13	40	
Makers of joiner's tools		10	20
Sawmakers	14	43	60
File manufacturers	40	47	80

These figures represent only the number of firms in Sheffield. The number of craftsmen they employed is another means of estimating the scale of the industry. In the *Local Register of Sheffield* (pp. xxix-xl), John Thomas reports that in 1830 he found 1,458 people engaged in making files, 463 in making saws, and 603 in making edge tools.

Sheffield firms boasted they could supply quality as well as quantity. The title page of a catalogue for the Castle Hill Works of Cutler and Company, published in Sheffield between 1833 and 1837 and bearing a title in longhand identifying it as "Book 87," includes the motto: "It is well known that a great proportion of Tools are manufactured Only to Sell, and, an Infallible Truth, That those are the Cheapest which do the most Work." Two engravings also appear on the title page, each a composite view of procedures at the factory which specialized in saws, files, edge tools, tools for joiners, knives, and forks. One engraving represents the melting and molding of cast, or crucible, steel (Fig. 1). In comparison to other steels known in the period, this steel was "more homogeneous in composition and more free from impurities."⁹ Perfected by Benjamin Huntsman (1704-1774), it was not accepted immediately. English manufacturers at first considered it a harder steel than most products required, but in the late eighteenth and early nineteenth centuries, tool manufacturers were among those recognizing the advantages it offered.¹⁰ The view of the manufacturing processes at Castle Hill reveals that workmen first cast the steel in ingots, then shaped and tempered the different forms. External appearance of the factory, transporting raw materials to it, and loading barrels packed with finished tools are all illustrated in the second engraving on the title page of the catalogue issued by Cutler and Company (Fig. 2). "Book 87" is typical of the catalogues used by factors, merchants, and craftsmen in placing their orders. Printed from engraved plates, the pages include illustrations of tools or parts for them, notes on dimensions, and comments on quantities that could be ordered (Figs. 3, 4). Prices, the most variable

⁸ ALFRED COXE PRIME, *The Arts and Crafts in Philadelphia, Maryland, and South Carolina, 1721-1785* (Philadelphia: The Walpole Society, 1929), p. 187.

⁹ H. R. SCHUBERT, "Extraction and Production of Metals: Iron and Steel," *A History of Technology*, ed. Charles Singer et al. (Oxford: The Clarendon Press, 1958), IV, 107.

¹⁰ SCHUBERT, 108.

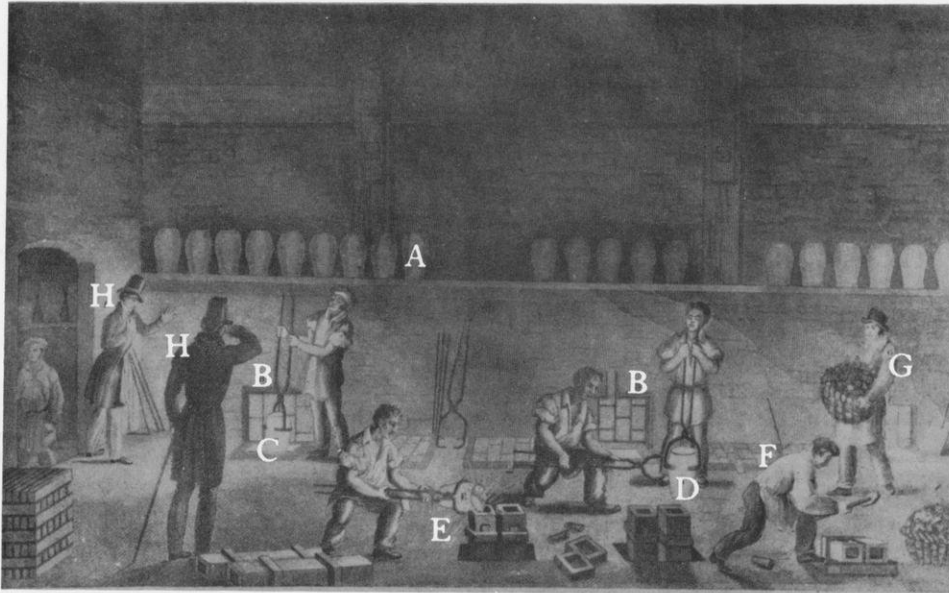


Fig. 1 Manufacturing Cast Steel, Castle Hill Works,
Engraving from title page, "Book 87," Cutler and Company Catalogue.
Sheffield, England, 1833-1837. H. 3", w. 5" (Victoria and Albert Museum).
Key to Procedures from the Title Page of "Book 87"
(Code Refers to White Letters Inserted in the Engraving)

- A "The Crucibles in which the Steel is melted"
- B and B "a row of Air Furnaces Sunk in the ground each containing two crucibles"
- C "a Crucible just drawn from the furnace"
- D "a Crucible out of which the Steel is about to be poured"
- E "a Crucible out of which the Steel is being poured into the Mould"
- F "a Man wedging a Mould"
- G "a Man bringing Cokes to replenish the Air Furnaces"
- H and H "Spectators shading their faces from the excessive heat"



Fig. 2 Shipping Procedures and Factory Buildings, Castle Hill Works,
Engraving from title page, "Book 87," Cutler and Company Catalogue.
Sheffield, England, 1833-1837. H. 3¼", w. 5½" (Victoria and Albert Museum).

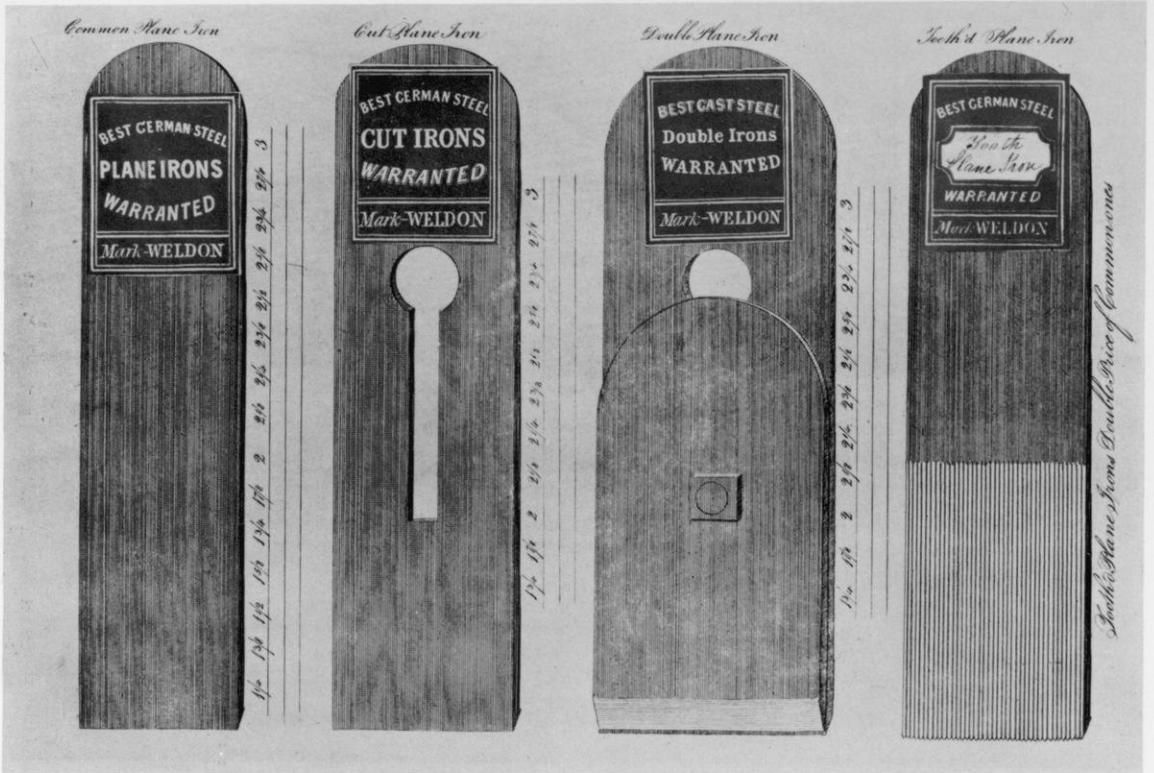


Fig. 3 Plane Irons, Cutler and Company Catalogue, "Book 87," Page 11. Sheffield, England, 1833-1837. H. (plate) $8\frac{3}{16}$ " , w. (plate) $12\frac{5}{16}$ " (Victoria and Albert Museum).

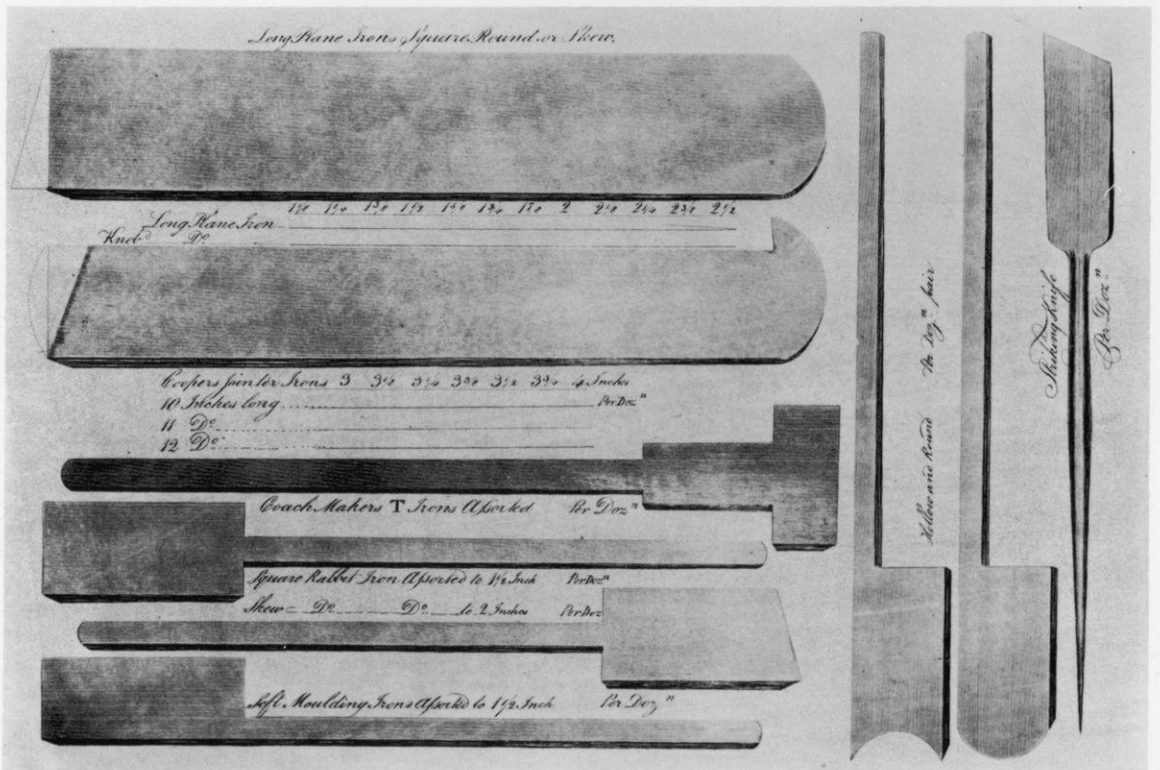


Fig. 4 Plane Irons, Cutler and Company Catalogue, "Book 87," Page 12. Sheffield, England, 1833-1837. H. (plate) $8\frac{13}{16}$ " , w. (plate) $12\frac{15}{16}$ " (Victoria and Albert Museum).

factors in a catalogue, were added in the appropriate blank spaces. By omitting and adding pages, or by filling out a different price schedule, a manufacturer could conveniently and economically issue a new catalogue for his customers in England and abroad.

Newspapers are among the best sources for documenting the importation of tools. They were, however, a relatively late development in the colonies and are informative only for the eighteenth and nineteenth centuries. Other sources of documentation, however, are available for the seventeenth century. In the initial stages of settlement, colonists recognized that survival depended upon immigrants bringing tools. A broadside, printed in London in 1622, suggests twenty separate categories of tools for prospective settlers in Virginia.¹¹

Ironworks were established in New England and the Middle Colonies during the seventeenth and eighteenth centuries, but they emphasized the production of pig and bar iron for export to the English Midlands. In 1700 the American colonies produced only one-seventieth of the world supply of raw iron. By 1775 colonial production of pig and bar iron exceeded that of England and Wales combined, raising the proportion of colonial production to one-seventh of the world supply.¹² English restrictive measures limited manufacturing; most American furnaces and forges, consequently, confined their production to castings and bar iron.

From the early eighteenth century until the mid-nineteenth century, newspapers in Boston, New York, Philadelphia, Annapolis, Williamsburg, and Charleston testify to the large-scale importation of tools from England and the Continent. On February 11 and 18, 1712, Andrew and Jonathan Belcher were selling hammers, whipsaws (large crosscut saws), steel hand-saws, and other "Joyners & Coopers Tools, being all of the best made from Sir Ambrose Crowley, Knight and Alderman of the City of London."¹³ Files, lathing hammers, stone trowels, carpenter's chisels, saws, and hammers were among the large assortment of tools from London, Sheffield, and Birmingham sold by Gilbert Deblois of Boston in 1746.¹⁴ Bristol, England, and Montrose, Scotland, were other sources for tools, according to the Boston merchants who offered them for sale.¹⁵

Advertisements frequently do not record the origin of tools but merely state they are imported. Joseph Hallet thought it important to mention that tools he offered for sale in *The New-York Mercury* of June 8, 1761, were "just imported in the last Vessels from England." His stock included "ship and house carpenter's axes, adzes, and mauls, blacksmith's vises, sledges, and hammers," as well as "a large assortment of files and rasps."¹⁶ Some merchants kept such a large inventory of tools that they preferred to list the crafts they could supply. Peter Goelet of New York, who kept a shop in 1763 at "the Sign of the Golden-Key in Hanover Square," sold, both wholesale and retail, "All sorts of Ship and House-Carpenter Tools, Goldsmiths, Gunsmiths, Blacksmiths, Shoemakers and Turners ditto." He

¹¹ The John Carter Brown Library, Providence, R. I., reproduced in MARSHALL B. DAVIDSON, *Life in America* (Boston: Houghton Mifflin Co., 1951), I, 51.

¹² RICHARD B. MORRIS, *Encyclopedia of American History* (New York: Harper & Bros., 1953), pp. 485, 493-496.

¹³ Dow, p. 224.

¹⁴ Dow, p. 227.

¹⁵ Dow, pp. 161, 230-233.

¹⁶ GOTTESMAN, *The Arts and Crafts in New York, 1726-1776*, pp. 222-223.

¹⁷ GOTTESMAN, *The Arts and Crafts in New York, 1726-1776*, pp. 223-224.

had imported some of these from Bristol.¹⁷ In 1764 William Scandrett, a brass founder of New York, imported from London tools, as well as supplies, for craftsmen.¹⁸

Records kept by merchants support the evidence newspapers provide for the importation of tools. The inventory taken on September 18, 1786, of the estate of Walter Franklin, a merchant in New York, included in his stock of imported metalware seventy-seven handsaws at 10 shillings per dozen, two and one-half dozen large gimblets at 3 shillings 6 pence per dozen, and five smoothing planes (with "3 new locks") valued at 10 shillings. The appraisal of Robert Perry's estate, made on January 16, 1811, noted the presence of merchandise imported for "assignees" of the deceased in the ship *Pacific* from Liverpool. The appraisers also drew a sketch of the markings on the packages. These symbols were the initial *R* in a lozenge, the initials *B* over *HEB* in a lozenge, and the initials *IH* in a lozenge. They appeared on two cases of "Buttons & Saws" valued at £191.7.11, a case of files worth £42, and one cask of hammers and snuffers, which were not evaluated.¹⁹

In Philadelphia the firm of Thomas, Samuel, and Miers Fisher acted as one of the principal wholesale importers and distributors of English tools for craftsmen. Entries from one of their ledgers reveal that on June 7, 1784, they sold the general merchants "Wilson & Hyrons":

½ doz common Handsaws	5/		1- 5-0
½ doz best steel plate ditto	12 2/6		3- 1-3
2 doz double worm Gimlets	3/		- 6-0
1 doz spike ditto	7/	1 doz ditto	11/ -18-0
1 doz steel compasses			- 6-6
1 dozen Claw Hammers			0-15-0
½ dozen ditto Solid Cheek	22/		-11-0
½ dozen ditto	27/		-13-6
1 dozen ½ inch Socket chisels	9/	1 doz inch	12/ 1- 1-0
1 dozen plane irons			0- 8-0

On June 18, 1784, the Fishers sold the same firm:

2 dozen Hand saw files	4 ½ inch	3/6	- 7-
2 dozen ditto	5/4	4/	- 8-
1 dozen bastard	3 Square		- 9-
1 dozen flat			-16-
½ dozen	12 inch drawing	[draw] knives	26/ -13-0
½ dozen	14 do	30/	-15-0 ²⁰

Southern craftsmen and farmers customarily looked to England for tools needed in their daily activities. In Williamsburg, Virginia, the silversmith James Geddy sold tools used by jewellers, goldsmiths, and watchmakers. At his store in the "Market-Place," Robert Lyon sold a more general assortment of tools to cabinetmakers, joiners, and shoemakers. The greatest variety of English tools, however, seemed to be available at John Greenhow's store "near the church." He could supply blacksmiths, saddlers, carpenters, shoemakers, joiners, bricklayers, silversmiths, cooperers, and turners.²¹

¹⁸ GOTTESMAN, *The Arts and Crafts in New York, 1726-1776*, pp. 195-196.

¹⁹ Winterthur Museum, Joseph Downs Manuscript and Microfilm Collection (hereafter DMMC), 54.37.57, 54.37.72.

²⁰ Journal of Thomas, Samuel, and Miers Fisher, 1784-1788, pp. 49-50, 60 (DMMC, microfilm 664.1, original manuscript owned by Henry A. Wood, Boston).

²¹ *The Virginia Gazette*, November 30, 1759; April 11, 1766; September 19, 1766; September 28, 1769; April 11, 1771; May 23, 1771.

A craftsman often supplemented his income by selling imported tools to others in the same trade. In Annapolis, Maryland, a firm of cabinet-makers, John Shaw and Archibald Chisholm, imported "a neat and general assortment of joiners and Cabinetmakers tools" from London. Their list proves that brass-mounted tools, usually considered an innovation of the early nineteenth century, were in use by American woodworkers before the Revolution:

Neat brass mounted stocks [bit stocks or braces] with 36 bits for each; common ditto with one bit for tapping casks; jack, trying, smoothing and jointer planes; double iron'd trying and smoothing ditto, double member'd sash planes; astrical [astragal], oyes, quarter round, and snipe bill ditto, beed [bead] planes with box edges; square, screw, and side rabbet planes; sash, moving, and common fillasters; cornice, raising, nozing and neck mould planes; table, cock, bead, and spring ditto; deal grooving planes of different sizes brass mounted; plows with 6 irons; and one regular set of hollows and rounds, &c.²²

One other factor contributed to the popularity of English tools. Transportation costs in the United States were so high before 1840 that distribution of American tools would have been unprofitable, even if an extensive industry had developed. The report of a United States Senate Committee, written in 1816, pointed out that "a ton of goods could be brought 3,000 miles from Europe to America for about nine dollars, but . . . for the same sum it could be moved only 30 miles overland in this country."²³ Reliance on foreign tools is further documented with a statement by Secretary of the Treasury Alexander James Dallas in the same year. His report to the Congress about proposed tariff rates classified hardware, ironmongery, and cutlery as "manufactures which were so slightly cultivated as to leave the demand of the country wholly, or almost wholly dependent upon foreign sources for a supply."²⁴

Some writers have suggested that urban craftsmen used imported tools and that rural artisans either made their own or had them made by other local craftsmen.²⁵ To some extent this was true; geographical location and a rural economy probably were determining factors. Craftsmen in the Dominy family, who used both English and American tools, may have been more representative of rural artisans. At the tip of Long Island in the village of East Hampton, three generations of the Dominy family, Nathaniel IV (1737-1812), Nathaniel V (1770-1852), and Felix (1800-1868), were clockmakers and cabinetmakers from about 1757 to about 1840. Residents of East Hampton were isolated by land but were in an excellent position to use Gardiners Bay and Long Island Sound for transportation to New York. The Dominy account books reveal the purchase of tools from an individual who sailed every week to New York City.

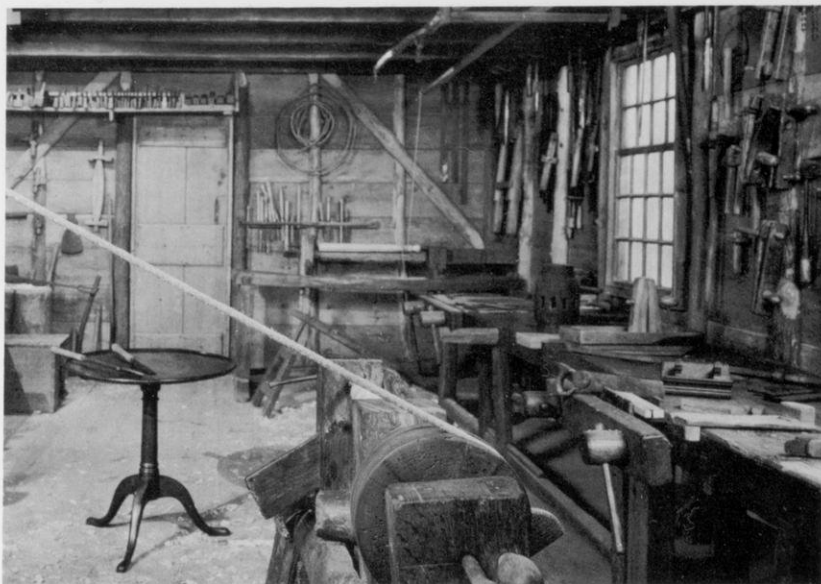
²² *The Maryland Gazette*, Supplement, May 6, 1773, as quoted in Prime, p. 182.

²³ As quoted in GEORGE ROGERS TAYLOR, *The Transportation Revolution, 1815-1860*, in *The Economic History of the United States*, ed. HENRY DAVID et al. (New York: Rinehart & Co., Inc., 1951), IV, 132-133.

²⁴ J. LEANDER BISHOP, *A History of American Manufactures from 1608-1860* (Philadelphia: Edward Young & Co., 1866), II, 221-223.

²⁵ CARL BRIDENBAUGH, *The Colonial Craftsman* (New York: New York University Press, 1950), p. 41.

Fig. 5 Reconstruction of Dominy Woodworking Shop at Winterthur, 1960.



The scarcity of cash in the local economy also forced the Dominy's to obtain tools from metalworkers in East Hampton as payment in kind for debts.²⁶

In 1957 the Winterthur Museum began to acquire the first group of tools, manuscript accounts, and products of the Dominy's. The woodworking shop and the clock shop used by these craftsmen were reconstructed with the encouragement of Henry Francis du Pont, Henry Belin du Pont, and members of the Dominy family. They now display the original tools and equipment used in them from the mid-eighteenth to the mid-nineteenth centuries. The shops had remained intact until 1946, when the Dominy house was destroyed and the shops moved and converted to other uses (Fig. 5).

The origin of many tools used by the Dominy's cannot be determined, but a number of them are marked and further document the sale of English tools in America. Although the catalogue below includes only English tools used in East Hampton, it presents types used by many American contemporaries of the Dominy's. Most of the tools bear the names or symbols of English manufacturers and can be traced to Sheffield. John Bebbington, City Librarian and Information Officer, Sheffield City Libraries, aided this research by completing a file in the Winterthur Library of every Sheffield city directory published before 1873. The number of Sheffield firms represented in the Dominy tools may reflect a preference by merchants in New York for tools made in Sheffield, or the accident of survival. Most of the tools which can be identified date from the nineteenth century. This circumstance is readily explained. When Felix Dominy began his career about 1817, many of the tools his father and grandfather had purchased to equip the shops were worn and in need of replacement. Felix Dominy may have purchased English tools because he could obtain them easily or, like many of his predecessors and contemporaries, he may have selected them purposely. He owned tools stamped *WELDON*, and even if he did not know the slogan of Cutler and Company of Sheffield, he may have endorsed its products because: "It is well known that a great proportion of Tools are manufactured Only to Sell; and an Infallible Truth, That those are the Cheapest which do the most Work."

²⁶ Account Book B, Nathaniel Dominy (1764-1813), East Hampton, New York, pp. 100-102, 105 (DMMC, 59x9a).

ENGLISH FIRMS PRODUCING TOOLS USED BY THE DOMINY CRAFTSMEN

ASHTON AND JACKSON

FLAT FILE: 1838-1861; steel; L. (including American white-ash handle) 13½"
(57.26.529, Gift of HENRY B. DU PONT).



The "flat," or "entering," file marked *ASHTON & JACKSON* and *WARRANTED / CAST STEEL* was used to smooth flat surfaces or corners joined at right angles. The manufacturer is first listed in the *Directory* of 1841 at 76 South Street, Sheffield, with the designation "American Merchants and Manufacturers." The company does not appear in the previous *Directory*, published in 1837, suggesting the partnership may have been formed between 1838 and 1841. In the 1849 *Directory* the firm is identified as "cutlery, file &c manufacturers." It continues to be listed in this manner until 1861, when it disappears from the directories.

BUTCHER, WILLIAM

METALWORKING FILE: 1818-1828; steel; L. (including horn handle) 15⅞"
(57.26.484, Gift of HENRY B. DU PONT).



MORTISE CHISEL: 1818-1828; steel; L. (including American ash handle) 10⅞"
(57.26.65, Gift of HENRY B. DU PONT).



MORTISE CHISEL: 1818-1828; steel; L. (including American hard-pine handle)
11 7/16" (57.26.237, Gift of HENRY B. DU PONT).



The mark *W. BUTCHER* appearing on a plane iron (not illustrated) and on the file and mortise chisels illustrated above, probably was in use for less than a decade. A firm with this name does not occur in the *Sheffield Directory* for 1817. The next *Directory*, published in 1821, lists, "Butcher, William, edge tools in all its branches, skates, saws, files, hoes, trowels, &c, manufacturer, Eyre Lane." A directory was not published after this date until 1828, when the firm "Butcher, Brown, and Butcher" appears on Eyre Lane. Its products included those of William Butcher in 1821, as well as "joiner's tools, West India and Brazil plantation tools." The English company "W. & S. Butcher" which applied for an American trade-mark in 1872 probably was the firm designated in the *Sheffield Directory* of 1833 as "Butcher Wm. and Saml." The *W. BUTCHER* stamp, therefore, could not have appeared on tools before 1818 and probably was discontinued by 1828.

CUTLER, HIRAM (See Weldon, William)

FENN, SAMUEL

FILE FOR CLOCKMAKING AND WATCHMAKING: ca. 1824; steel; L. (including cherry handle) 7 11/16" (57.26.539, Gift of HENRY B. DU PONT).



FILE FOR CLOCKMAKING AND WATCHMAKING: ca. 1824; steel; L. (including soft-maple handle) 5 1/4" (57.26.535, Gift of HENRY B. DU PONT).



The maker of these files, who used *FENN* as his mark, conducted his business in London, not in Sheffield, and was active about 1824. In that year, page 169 of *Pigot and Co.'s City of Dublin and Hibernian Provincial Directory . . . to which is Added a Comprehensive Directory of London* lists Samuel Fenn of 105 Newgate Street, London, as a "tool maker and dealer."

FRANCE, JONATHAN

TURNING TOOL FOR METALWORKING: ca. 1797; steel; L. (including dogwood handle) 9 7/8" (57.26.417, Gift of HENRY B. DU PONT).



One of the most useful indexes in the early Sheffield directories is that for trade-marks used by different types of skilled metalworkers. Without this index, it would be impossible to link manufacturers with tools marked only by initials or symbols. The usefulness of the index to trade-marks is demonstrated by the identification of a turning tool used on the lathe for metalworking in the Dominy Clock Shop. Following the common practice among craftsmen of converting files, with their excellent steel, into other useful tools, the Dominys fashioned their turning tool from a triangular-shaped file. The mark on the tang consists of two conjoined letter *U*'s over the initials *FF*. Under a listing of file makers at work in Sheffield in 1797, this symbol is assigned to Jonathan France, a "filesmith," at 127 Pea-croft (*A Directory of Sheffield, Including the Manufacturers of the Adjacent Villages; with the Several Marks*, page 68). France does not appear in the earlier *Directory* of 1787 or the later *Directory* of 1817.

FURNISS, CUTLER, AND STACEY (See Weldon, William)

GENN, SAMUEL

CHISEL FOR WOODTURNING: 1774-1787; steel; L. (including ash handle) 13"
(57.26.122, Gift of HENRY B. DU PONT).



The chisel for woodturning in the Dominy Shop was made from a file with worn teeth. The handle is stamped *FD*, a mark used by Felix Dominy (1800-1868), who probably was responsible for converting the file to a chisel in the nineteenth century. Stamped on the file, under a symbol resembling a tulip, are the initials *BN*. These initials can be identified as the mark of Samuel Genn, a filesmith of Sheffield, active from 1774 to at least 1797. Genn retained them as his mark throughout this period but changed his device at least twice. The mark illustrated above appears in *Sketchley's Sheffield Directory* published in Bristol in 1774 (p. 13). In 1787 a stylized fleur-de-lis appears above Genn's initials *BN* (page 7 of Gales and Martin, *Directory of Sheffield*, republished in facsimile in 1889 by Pawsin and Brailsford); in 1797 the symbol is replaced by a stylized flower (page 141 of J. Montgomery, *A Directory of Sheffield*). From 1787 to 1797 Genn resided and probably conducted his business at "24, Smithfield." The *Sheffield Directory* of 1817, the first to be issued after 1797, does not list Genn.

GREAVES, WILLIAM AND SONS

FILE FOR CLOCKMAKING: 1817-1833; steel; L. (including handle) 10 $\frac{7}{8}$ "
(63.156.55, Gift of CRESTLEA FOUNDATION).



FILE FOR CLOCKMAKING: 1817-1833; steel; L. 7 $\frac{1}{8}$ " (63.156.237, Gift of CRESTLEA FOUNDATION).



FILE: 1828-1841; steel; L. 4 $\frac{5}{8}$ " (63.156.236, Gift of CRESTLEA FOUNDATION).



FILE FOR METALWORKING: 1817-1833; steel; L. 11 $\frac{3}{8}$ " (63.156.148, Gift of CRESTLEA FOUNDATION).



Greaves and his sons probably intended to export much of their production to the United States, for the Sheffield directories list them as "American merchants." The toolmakers first appear in the *Directory* of 1817 with an establishment on "Division-street." Between 1828 and 1833 William Greaves and Sons moved to the "Sheaf Works" on Maltravers Street. In the directories of 1833 and 1841, the firm is described as "steel converters . . . and manufacturers of table knives, razors, edge tools, &c." The mark of the firm, before it moved from Division Street to Maltravers Street, appears on three files in the Dominy Collection, thus dating them between 1817 and 1833. In addition to the mark *W. GREAVES / & SONS* on the four files illustrated above, the mark *SHEAF WORKS* is stamped on the tang of the third example. It can be dated, therefore, between 1828 and 1841.

GREEN, JOHN

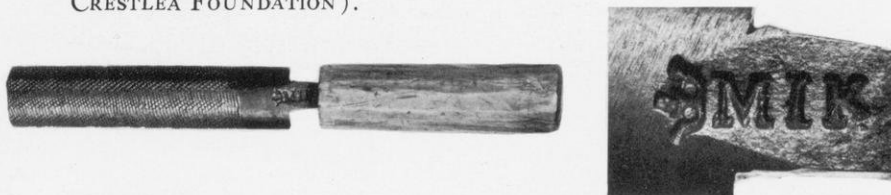
FLUTING CHISEL: ca. 1817-ca. 1833; L. 6 $\frac{3}{4}$ " (63.156.194, Gift of CRESTLEA FOUNDATION).



This chisel, used by the Dominy craftsmen to make narrow grooves in decorating their cabinetwork, is stamped *JOHN GREEN* but cannot be assigned to a specific craftsman. During the last quarter of the eighteenth century and for at least half of the nineteenth century, several members of the Green family produced tools in Sheffield. John Green and Son, Hannah Green and Son, and Jane Green and Son are described as "edge tool makers" in the 1774 *Directory*. To make the attribution more difficult, Hannah Green and Son are identified with the mark *John Green* in the 1787 *Directory*, perhaps erroneously. The clue to the maker probably is the term *CAST STEEL* stamped on the chisel blade. This term indicates that the chisel was produced in the nineteenth century, when many Sheffield firms adopted cast steel for tools. The 1817 *Directory* lists John Green, "Factor," on Burgess Street, the same street on which John Green and Son were located in 1774. The subsequent directories of 1820 and 1833 list a John Green as a "fork, knife, and scissor manufacturer." Another John Green, a "file cutter" in "Chapel yard, Bow Street," appears in the 1833 *Directory* and again in the 1841 *Directory* with a change of address to the "Gas office yard, Bow Street." Although the maker of the fluting chisel cannot be determined with certainty, the tool probably was made in Sheffield, where several craftsmen were active from 1817 to 1833 who could have used the mark "John Green" as well as the term "cast steel."

HILL, MICHAEL

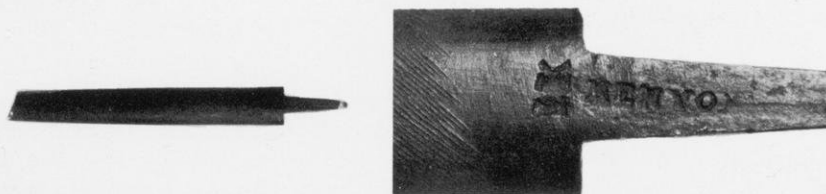
FILE (RASP): ca. 1797; steel; L. (including handle) $9\frac{3}{8}$ " (63.156.48, Gift of CRESTLEA FOUNDATION).



The trade-mark illustrated above appears next to the name of Michael Hill, "File Maker" at 62 Pond Street, only in the *Directory* of 1797. He is not listed in the *Directory* of 1787 nor in that of 1817, the only guides published before and after 1797.

KENYON, JOHN AND COMPANY

FILE: 1774-1841; steel; L. $5\frac{3}{4}$ " (63.156.209, Gift of CRESTLEA FOUNDATION).

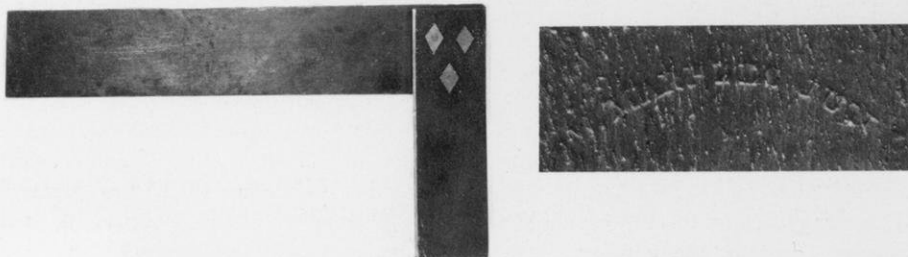


John Kenyon, "file manufacturer," is first listed in the 1774 Sheffield *Directory* in partnership with a relative, Joseph Kenyon. The firm was in "Hollis-Croft" (listed in subsequent directories as "Hollis-croft" and "Hollis Street"). By 1787 John Kenyon was in business alone at the address of 1774. In the directories of 1774 and 1787, his mark is listed as the initials *JK*. Between 1797 and 1817, his firm became "John Kenyon and Co., Filemakers." The *Directory* of 1828 records that this company was still located in "Hollis-croft" and describes members of the firm as "merchants, saw, file, bar, and sheet iron and steel manufacturers." By 1833 the firm had moved to

"Willey Street," where it was still located in 1841. The file stamped *IK / KENYON*, therefore, could have been made at any time between 1774 and 1841.

MARPLES, WILLIAM, JR.

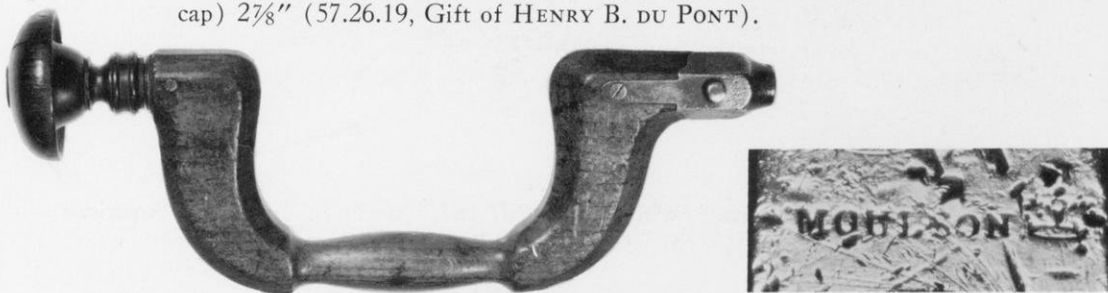
SQUARE: 1833-1849; brass, mahogany, steel; L. (handle) 5 $\frac{7}{8}$ ", L. (blade) 10 $\frac{3}{4}$ " (63.156.5, Gift of CRESTLEA FOUNDATION).



From 1833 to 1849, William Marples, Jr., manufactured "joiners' tools, braces, bits, and skates" on Broomhall Street in Sheffield. The semicircular stamp *W. MARPLES JUN* appears on a square probably purchased by Felix Dominy shortly after 1833. A William Marples, presumably the father of the craftsman active in the 1830's and 1840's, is listed in the Sheffield directories of 1821 and 1828 but not in the *Directory* of 1833. The firm of William Marples and Son was producing tools for craftsmen as recently as 1928, when it published a tool catalogue (see page 21 of the article, "The Sabot Maker," *The Chronicle* of the Early American Industries Association, XVII [June, 1964]).

MOULSON BROTHERS

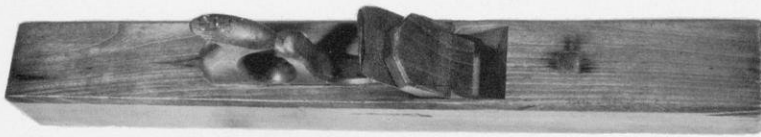
BRACE (OR BITSTOCK): 1828-1841; beech, rosewood, brass; L. 14 $\frac{1}{8}$ ", Diam. (of cap) 2 $\frac{7}{8}$ " (57.26.19, Gift of HENRY B. DU PONT).



The addition of metal to the wooden parts of tools was an improvement of the late eighteenth and early nineteenth centuries. The brace used by the Dominys is an excellent example of the new construction. Previously, woodworkers generally had the experience of seeing the wooden end of a brace, where the bit was forced into the stock, split from repeated pressure and torque. The brass mount with a spring catch, which secured a bit to the stock, eliminated this problem. Near the catch release of the Dominy brace, Moulson Brothers stamped the mark they used from 1828 to 1841. These Sheffield "saw and joiners tool manufacturers" were located on Tudor Street in 1828, but by 1833 they had moved to the "Union Works" in Division Street. In the latter year, William White described the firm as "saw, edge, tool, joiners tool, brace, bit, and skate mfrs. and merchants" in his *History and General Directory of the Borough of Sheffield*.

NEWBOULD, SAMUEL

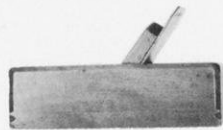
TRYING PLANE: 1802, with Blade 1787-1841; steel; L. (including American beech block) 24 13/16" (57.26.1, Gift of HENRY B. DU PONT).



TRYING PLANE: 1765-1800, with Blade 1787-1841; steel; L. (including American beech block) 26" (57.26.8, Gift of HENRY B. DU PONT).



SMOOTHING PLANE: 1787, with Blade 1787-1841; steel; L. (including satinwood block) 6 3/4" (57.93.59, Gift of ROBERT M. DOMINY).



COMPASS PLANE: 1803, with Blade 1787-1841; steel; L. (including American beech block) 6 3/4" (57.93.58, Gift of ROBERT M. DOMINY).



CARVING GOUGE: 1815-1841; steel; L. (including hickory handle) 7 1/2" (57.26.133, Gift of HENRY B. DU PONT).



Members of the Newbould family made edge tools in Sheffield from 1774 to at least 1841. It is not surprising, therefore, to find the stamp *NEWBOULD* on the blade of the modeling plane bearing the initials of Nathaniel Dominy IV (1737-1812) and the date 1787, on the irons of the trying plane and smoothing plane stamped with the mark of Nathaniel Dominy V (1770-1852) and the dates 1802 and 1803, and on the blade of the trying plane and the carving chisel used between 1800 and 1841 by Nathaniel Dominy V.

Thomas Newbould, a maker of shears and edge tools, appears in the Sheffield directories from 1774 through 1797. Samuel Newbould is first listed as a maker of edge tools in the *Directory* of 1787 and is assigned the trade-mark illustrated above. Between 1797 and 1817, Samuel's business must have expanded, for the Sheffield *Directory* of the latter year lists his firm as "Newbould Samuel and Co., merchants, saw, fender, edge tool, wool shear, and steel manufacturers, South Street." This listing continues through 1841. It is possible that several members of the Newbould family formed a cooperative venture. Adding weight to this conjecture is a listing in the 1828 *Directory* for Thomas and William Newbould as "American merchants," also located on South Street. Only one other English toolmaker's mark, that of William Butcher, appears as frequently in the Dominy tool collection.

SORBY, JOHN AND SONS

GOUGE: 1821-1841; steel; L. (including hawthorn handle) 11½" (57.26.116, Gift of HENRY B. DU PONT).



Probably at the request of this Sheffield firm, the *Directory* of 1833 states: "All goods of their manufacture are marked I&H.Sorby." The mark appears on a gouge used either by Nathaniel Dominy V or by Felix Dominy from about 1820 to 1840. John Sorby and Sons were producing tools from at least 1821 to 1841. In the directories of this period, they are described as merchants and factors as well as manufacturers of edge tools, braces and bits, tools for joiners, files, saws, spades, and shovels. The firm was located at 26 Spittal Hill.

STUBS, PETER S.

FILE FOR METALWORKING: 1790-1810; steel; L. (including white-pine handle) 16" (57.26.292, Gift of HENRY B. DU PONT).



Two pages of a catalogue with the engraved inscription "Peter Stubs Warrington" are illustrated by the late George H. Kernodle in his article, "Concerning the Simon Willard Legend," *Antiques*, LXI (1952), 524. Efforts to locate Kernodle's source or another copy of this catalogue, which he states was issued in 1790 and included "nearly 500 tools" for clockmakers, have not been successful. The probability that the maker of

the file shown above and stamped *PS / STUBS* was the Peter Stubs of Warrington who issued the catalogue of tools for clockmaking reported by Kernodle is strengthened by the presence among the Dominy tools of a small file (not illustrated) probably intended for use on clock parts and also stamped *PS / STUBS*.

TILLOTSON, JOHN AND SON

FORMING CHISEL: 1818-1841; steel; L. (including replaced handle) 9"
(57.26.252, Gift of HENRY B. DU PONT).

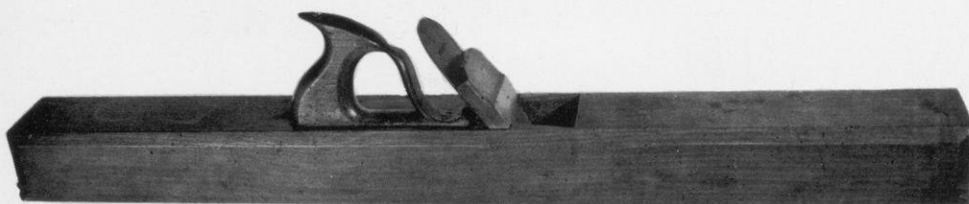


The forming chisel stamped *TILLOTSON / SHEFFIELD* and *PATENT / CRYSTALLIZED / CAST STEEL* could not have been purchased by the Dominy craftsmen before 1818. The Tillotson firm is not listed in the *Directory* of 1817 and, therefore, probably was formed after this date and before 1821, when the company first appears in the Sheffield directories. It is questionable whether or not this firm made tools, because, when first listed, it is described as a "factor, and table knife manufacturer." In 1828 John Tillotson and Son were listed as "merchants" and "manufacturers" of scissors and table knives, steels for butchers, and "dealers in edge tools, files, &c." Although the term "dealers" is ambiguous, the distinction between it and "manufacturers" suggests the Tillotsons were only distributors of edge tools. The firm was in business at 54 Coalpit Lane from the first directory listing until 1841.

WELDON AND FURNISS (See Weldon, William)

WELDON, WILLIAM

LONG JOINTER PLANE: 1766, with Blade 1787-1841; steel; L. (including American beech block) 33½" (59.158.1).



MODELING (OR COMPASS) PLANE: 1765-1800, with Blade 1787-1841; steel; L. (including American beech block) 7¼" (57.93.52, Gift of ROBERT M. DOMINY).



CHISEL: 1787-1841; steel; L. (including ash handle) 8 $\frac{7}{8}$ " (57.26.67, Gift of HENRY B. DU PONT).



The Weldon mark demonstrates the persistence of a trade-mark among Sheffield toolmakers through changes in the ownership of a firm. William Weldon, "wool shear and edge tool maker, Colston croft," is first listed in the Sheffield *Directory* of 1774 and assigned the mark *W. WELDON*. By the publication of the next *Directory* in 1787, his mark had been simplified to *WELDON*. Blades in the three tools illustrated above bear this stamp and probably were made after 1787. The block of the long jointer plane bears the initials *ND* and the date 1766. After use for a generation, the plane iron apparently was replaced.

Before publication of the 1817 *Directory*, the Weldon firm had become "Weldon and Furniss" on "Castle-Hill" and had turned to the production of edge tools. In 1828 Weldon, or his relatives, presumably left the business, for the company is listed as Furniss, Cutler, and Stacey in the directory of that year, still located on Castle Hill. This company of 1828 is identified as a merchant and a manufacturer of saws and edge tools, a converter of bar steel, and a refiner of cast steel. In the 1833 *Directory* the listing remains the same and does not change until 1841, when Hiram G. Cutler appears as the sole owner of the works on Castle Hill. His activities include "merchant, steel converter, saw, edge tool, file, and table, shoe and butcher knife manufacturer."

These firms all retained the trade-mark *WELDON*. The continuing use of the mark is demonstrated by a Cutler and Company catalogue published between 1833 and 1837. Although the date is not stated on the title page, a number of tools illustrated in the catalogue, "Book 87," are stamped with a crown and initials *WR* for "William Rex." It can be assumed, therefore, that the catalogue must have been printed after 1833, when the Sheffield *Directory* still lists Furniss, Cutler, and Stacey as owners of the Castle Hill Works, and before 1837, the beginning of Queen Victoria's reign. All the plane irons depicted on a page in the catalogue (Fig. 3), are marked *WELDON*, and, in addition, the title page states concerning tools: "None are genuine, unless stamped—*WELDON*." The Weldon mark, which first appeared in 1787, was still in use fifty years later.

WING, SAMUEL W.

FILE FOR METALWORKING: 1821-1841; steel; L. (including cherry handle) 15 $\frac{5}{8}$ " (57.26.530, Gift of HENRY B. DU PONT).



Sheffield directories list Samuel Wing as a "file manufacturer" from 1821 through 1833. It can be assumed that his career in Sheffield ended between 1833 and 1841, for he does not appear in the *Directory* of the latter year.