

The Plantation Hoe: The Rise and Fall of an Atlantic Commodity, 1650–1850

Chris Evans

FEW commodities in Atlantic history can be as humble as the plantation hoe. The only remarkable thing about this most prosaic of tools, it appears, was its abundance. In 1690, when Sir Dalby Thomas, merchant and chronicler of “the West-India Colonies,” dilated on “the Great Advantages” that England’s Caribbean possessions brought to the home country, he claimed that every slave in the islands “consumes yearly two Hilling-Hoes, two Weeding-Hoes, [and] two Grubbing-Hoes” of English manufacture.¹ Indeed the plantation hoe, from the Chesapeake to the Caribbean, was the instrument that pushed the frontier of Britain’s Atlantic empire forward. It was one of the most ubiquitous articles in the

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Chris Evans teaches history at the University of Glamorgan. Research for this paper was made possible through visiting fellowships at the Institute of Southern Studies of the University of South Carolina, the John D. Rockefeller, Jr. Library of the Colonial Williamsburg Foundation, the Virginia Historical Society, and the Winterthur Museum, Garden, and Library. The author thanks those bodies for their generosity. He has received a great deal of sage advice from other historians, archaeologists, and museum professionals in the course of his research. It may be invidious to do so, but he must single out the following for sharing their expertise: at Colonial Williamsburg, Jay Gaynor, Ken Schwarz and his colleagues at the Anderson Blacksmith Shop, Lorena S. Walsh, and Emily Williams; at Historic Jamestowne, Thomas E. Davidson; at the South Carolina Department of Archives and History, Charles Lesser; and at the Virginia Department of Historic Resources, Keith Egloff. A draft of this article was written in the course of a Gilder Lehrman Fellowship at Colonial Williamsburg’s Rockefeller Library; the author owes much to the staff there for their professionalism and hospitality. He must also give thanks for the good service delivered by staff at the many archive repositories listed in the footnotes. The argument has been rehearsed before audiences at the Universities of Gloucestershire and Oxford and at the Institute of Historical Research, London, and Penelope J. Corfield, David Cranstone, Andy Croll, Göran Rydén, Alun Withey, and anonymous readers for the *William and Mary Quarterly* commented in detail on the text. The author is grateful to all concerned for their criticisms and suggestions. Responsibility for the text remains solely his, of course.

¹ Sir Dalby Thomas, *An Historical Account of the Rise and Growth of the West-India Colonies and of the Great Advantages they are to England* (London, 1690), quoted in Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York, 1985), 41.

British colonial world. But was the hoe significant for anything other than ubiquity? It was simple in form and severely functional, without decorative or ornamental features. Few items seem as unlikely to exhibit variations in form or purpose that would repay close study. Certainly, contemporaries saw little in the hoe worthy of discussion. Agricultural improvers lavished attention on the plow, seed drills, and other items of machinery; the hoe aroused nothing but indifference. Historians have followed suit. There is a distinguished scholarly tradition that pays serious attention to the plow; the same respect has never been accorded to the plantation hoe.²

Yet for all its obviousness, the hoe has a complex and knotted history. Its use (or nonuse) is a cultural marker of profound significance. The division of humanity into those who use the plow and those who use the hoe is a staple of anthropology and has become so in history. Fernand Braudel marveled at the "vast extent of the land where work is done mainly with either a digging stick (a sort of primitive hoe) or a hoe." The hoe's domain encircled the premodern globe, running through "Oceania, pre-Columbian America, Black Africa and a large part of south and south-east Asia."³ The people of the hoe were to be distinguished from the people of the plow, who tilled more northerly parts of the globe.

The opening up of the Atlantic world, however, introduced a complicating factor. The spread of plantation agriculture through the New World in the seventeenth century was based on the hoe, but one that bore little resemblance to anything previously known in the Americas. Native peoples, lacking any knowledge of ferrous metallurgy, had scratched at the soil, sometimes with fire-hardened sticks and sometimes with implements that incorporated animal bones or clamshells.⁴ These self-made implements soon gave way to European-made tools of a new type. The hoes that were

² Resourceful historians have, in fact, gleaned much from the study of harvesting tools; see Michael Roberts, "Sickles and Scythes: Women's Work and Men's Work at Harvest Time," *History Workshop Journal* 7, no. 1 (Spring 1979): 3–28; Roberts, "Sickles and Scythes Revisited: Harvest Work, Wages and Symbolic Meanings," in *Women, Work and Wages in England, 1600–1850*, ed. Penelope Lane, Neil Raven, and K. D. M. Snell (Woodbridge, U.K., 2004), 68–101. Marc Bloch, to invoke one commanding figure, made large claims for the wheeled plow as a key determinant of social organization in Bloch, *French Rural History: An Essay on Its Basic Characteristics*, trans. Janet Sondheimer (Berkeley, Calif., 1966), and the field of medieval studies retains a willingness to treat agricultural tools with due seriousness. See for example Robert Bartlett, *The Making of Europe: Conquest, Colonization and Cultural Change, 950–1350* (London, 1993), 148–52, which equates the spread of the heavy "German" plow in eastern Europe with the advance of Latin Christendom.

³ Fernand Braudel, *Civilization and Capitalism, 15th–18th Century*, vol. 1, *The Structures of Everyday Life: The Limits of the Possible*, trans. Siân Reynolds (London, 1981), 174.

⁴ William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York, 1983), 43; Timothy Silver, *A New Face on the Countryside: Indians, Colonists, and Slaves in South Atlantic Forests, 1500–1800* (Cambridge, 1990), 48.

used in growing tobacco in the Chesapeake or sugar in the Caribbean did not, therefore, embody an archaic tradition. With their sturdy metal blades, they were a radical departure from it.

These new-model hoes raise perplexing questions. As manufactured items, they originated in Europe, the heartland of the plow, where they were made by metalworkers who had no knowledge of the environment in which they were to serve. In Britain the word "hoe" commonly referred to a light gardening tool—the so-called Dutch hoe—that differed fundamentally from its plantation counterpart. The Dutch hoe was employed only to sever the roots of weeds; the user held it at hip height and applied it to the soil with a moderate back-and-forth thrusting action. The plantation hoe, by contrast, was grasped in the manner of an ax and brought down from shoulder level with percussive force. In other words, it was without north European precedent. Nothing like it features, for instance, in Randle Holme's *Academie of Armorie*, a voluminous guide to late seventeenth-century farming technology. To take another example, a variety of trenching tools were discussed in Walter Blith's influential *English Improver Improved*; hoes were not. For north Europeans to imagine the hoe as the primary instrument of agriculture required overcoming a deeply embedded preference for the plow. The plantation hoe could not spring, fully formed, from a European template; it had to be invented. In this respect the plantation hoe is best seen as a specifically Atlantic commodity. Like the Madeira wine studied by David Hancock, it had no existence and no meaning before the emergence of an integrated Atlantic economy. It was not the product of one set of people or one place; it drew inspiration from a variety of points on the ocean's circumference. Indeed the hoe was the outcome of a panhemispheric commodity chain that terminated in the plantation zones of the New World but began in the far north of the Old.⁵

⁵ Was it a memory of the horticultural Dutch hoe that led Virginia planter William Byrd II to advance the startling claim that the toil of his slaves was near recreational? "Nor indeed is their Labour any other than Gardening," he wrote, "and less by far, than poor People undergo in other Countrys." Byrd to Peter Beckford, Dec. 6, 1735, William Byrd II Letter Book, 1735–1736, Virginia Historical Society, quoted in Anthony S. Parent Jr., *Foul Means: The Formation of a Slave Society in Virginia, 1660–1740* (Chapel Hill, N.C., 2003), 224. The garden analogy was also used in the West Indies. A "sugar estate must be cultivated more like a garden, than like a farm," one Bristol merchant house told a Caribbean correspondent in 1796. Tobin, Pinney, and Tobin to Henry Keyworth, Aug. 19, 1796, quoted in Richard Pares, *A West-India Fortune* (London, 1950), III. On Randle Holme, see N. W. Alcock and Nancy Cox, *Living and Working in Seventeenth-Century England: An Encyclopedia of Drawings and Descriptions from Randle Holme's Original Manuscripts for "The Academy of Armory"* (1688) (London, 2000), CD-ROM. Significantly, the hoe has no index entry in G. E. Fussell's standard history *The Farmer's Tools: The History of British Farm Implements, Tools and Machinery, AD 1500–1900* (London, 1952). By contrast, entries for the plow in its various forms occupy two full columns. On trenching tools, see Walter Blith, *The English Improver Improved; or, The Survey of Husbandry Surveyed . . .* (London, 1652), 67–70. On Madeira wine, see David Hancock,

Though made in Europe, the hoe was used to cultivate plantation crops that stood outside the European mainstream: sugar and tobacco. That surely accounts for the long initial hesitancy as to what a hoe was and how it should be used. The first English migrants to the Chesapeake were advised to come equipped with "howes," but there was no set answer as to what one looked like.⁶ Archaeological evidence from early and mid-seventeenth-century Virginia shows great variation in form. Failure to settle on an agreed model no doubt reflected a lack of familiarity with hoe-based agriculture. With no experience of their own to draw on, the English, when they started to grow tobacco in the 1610s, had little option but to adapt the practices of the native peoples they encountered, heaping the earth into individual piles, one for each seedling, rather than plowing furrows European-style. (By contrast, when the English and the Dutch began to cultivate tobacco on home soil, they made no use of the hoe or of American practices; they relied on preexisting European horticultural methods.)⁷ The hoes imported into the Chesapeake only began to assume a more standardized form in the 1670s. The flared blades that had been common in the middle decades of the seventeenth century gave way to much fuller, square-shouldered models (Figure I).

Intriguingly, this shift coincides with the first movement away from the employment of indentured English laborers and the use of bonded Africans in their place. It is tempting to posit a link between the two. The momentous switch to slave labor (which had already occurred in the Caribbean a generation earlier) brought to the tidewater people who were far better acquainted with the hoe than the hapless English servants they replaced. Africans, unlike Europeans, did have an ancestral affinity with the hoe—they were a people of the hoe—and as plantation agriculture intensified in the New World, the hoe became the signature tool of slaves. Yet caution should be exercised before ascribing changes in design to African influences. The New World context into which enslaved Africans were

"Commerce and Conversation in the Eighteenth-Century Atlantic: The Invention of Madeira Wine," *Journal of Interdisciplinary History* 29, no. 2 (Autumn 1998): 197–219. The commodity chain in question originated, to be precise, at latitude 60 degrees north at the giant Dannemora mine in Sweden, where the iron ore used in the steel that edged every British-manufactured hoe was excavated.

⁶ A broadsheet issued by the Virginia Company in 1622, *The Inconveniences that have Happened to Some Persons which have Transported themselves from England to Virginia*, advised migrants to come with both broad and narrow "howes." The broadsheet is reproduced in James M. Gaynor and Nancy L. Hagedorn, *Tools: Working Wood in Eighteenth-Century America* (Williamsburg, Va., 1993), 23.

⁷ Joan Thirsk, "New Crops and Their Diffusion: Tobacco-Growing in Seventeenth-Century England," in *Urban Growth and Rural Change, 1500–1800*, ed. C. W. Chalklin and M. A. Havinden (London, 1974), 76–103; H. K. Roessingh, "Tobacco Growing in Holland in the Seventeenth and Eighteenth Centuries: A Case Study of the Innovative Spirit of Dutch Peasants," *Acta historiae Neerlandicae* 11 (1978): 18–54.

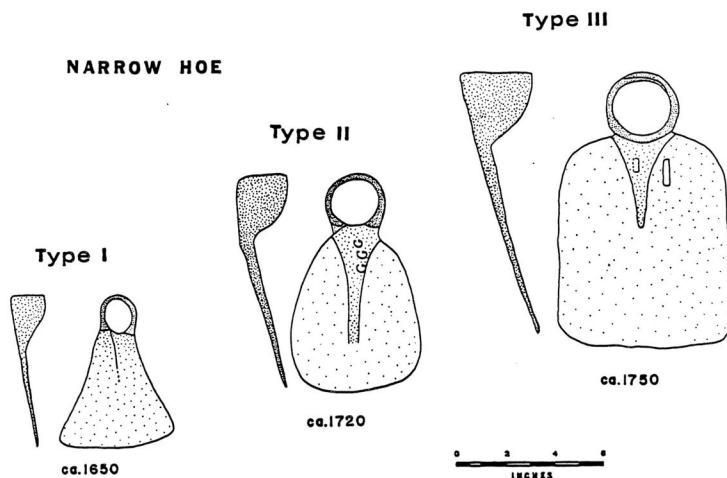


FIGURE I

Changes in the form of narrow hoes in Virginia, as tracked in Keith Egloff, *Colonial Plantation Hoes of Tidewater Virginia* (Williamsburg, Va., 1980), 27. Egloff's report is a rare attempt to consider systematically the morphological development of plantation hoes. Using a set of 162 hoe heads recovered from sites along the James River in Virginia, Egloff identifies three successive models: Type 1, which was most commonly used in the period 1620–75; Type 2, which first appeared ca. 1680; and Type 3, which made its debut ca. 1740. Courtesy, Virginia Department of Historic Resources.

pitched was dramatically different from anything they had previously experienced. Those who might have handled the hoe as peasant producers in the Old World were now in the service of an international agro-industry. Besides, the bulked-up eighteenth-century plantation hoe was a distant and grossly inflated cousin of the implements used in West-Central Africa. It was in many respects as alien to Africans as it was to Europeans. This was doubly the case regarding the issue of which Africans were set to the hoe. In Africa—to generalize wildly—the hoe was far more associated with women's labor than with men's. In plantation America, as male slaves were dragooned into field labor, this gender order was thoroughly disrupted.⁸

⁸ François Sigaut, "Essai d'indentification des instruments à bras de travail du sol," *Cah. Orstrom*, sér. Sci. Hum., 20, nos. 3–4 (1984): 359–74, argues that the hoe is to be found in traditional societies where two conditions are met: draft animals must be absent but ferrous metallurgy present. The conditions are only found in two areas of the world: the valley of Kathmandu, which can be disregarded for the present purposes, and West-Central Africa. Regarding gender and field labor, Jack Goody notes: "Plough agriculture with male farming is largely confined to Eurasia; in Africa, hoe farming with female farming predominates" (Goody, *Production and Reproduction: A Comparative Study of the Domestic Domain* [Cambridge, 1976], 35).

SEEN FROM THIS PERSPECTIVE, the plantation hoe loses some of its deceptive familiarity. It must be seen as a new good, one whose design was not stable. As such, it poses historiographical problems. The past thirty years have seen a deepening interest in consumption on the part of historians of the Atlantic world. The burgeoning world of goods now commands far greater attention among historians of Britain and its empire than does the traditional story of the Industrial Revolution. Whereas process innovations (the steam engine, the spinning jenny, the flying shuttle, et al.) once loomed large, it is now product innovation that appears seminal. A flood of novelties added to domestic comfort in nonelite homes: a greater range of fabrics, ribbons, buckles, and clasps that gave variety to the wardrobe; new forms of furniture; cooking utensils that were lighter or more specialized in purpose; and so forth. All of these contributed to a progressive shift in routine and lifestyle that stretched across the eighteenth century; they were not concentrated in a burst at the century's end as were the great industrial inventions of James Watt, Sir Richard Arkwright, Henry Cort, and the others. Moreover, where once historians emphasized the singularity of economic change in Britain—the transformation of production we know as the Industrial Revolution—they now look to a more broadly based change in consumption that was felt as profoundly in the colonial world as in the imperial metropole.⁹

When accounting for shifts in consumption, historians have focused on two related questions—how it happened and why it happened. The question of *how* has been answered most influentially by Jan de Vries with his concept of an “industrious revolution.”¹⁰ The industrious revolution of the early modern period depended on a reallocation of labor within the household. Industrious households were those whose members spent less time on activities that were directly related to the reproduction of their own daily life within the household unit and more time on external, wage-earning activities. A concentration on wage-earning opportunities underwrote an expansion in the circulation of specialized goods and services. In addressing the question of *why* consumption patterns altered, historians have invoked attitudinal change, specifically the overcoming of inhibitions about material abundance, whether the teaching of Christian moralists who revered self-restraint or the anxiety, inherited from the classical world, that “luxury” was pernicious and corrupting.

⁹ The literature is now so vast that it is perhaps best judged by the distance traveled between three landmark publications: the initial statements in Neil McKendrick, John Brewer, and J. H. Plumb, eds., *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England* (Bloomington, Ind., 1982); the agenda-setting Brewer and Roy Porter, eds., *Consumption and the World of Goods* (London, 1993); and the more recent Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005).

¹⁰ Jan de Vries, *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present* (Cambridge, 2008).

But arguing that cultural barriers to the accumulation of goods were being lowered is not the same as explaining why particular goods were esteemed or used in particular ways. It is here that historians have turned to explanatory models that focus on the uses to which new goods were put by those who bought them. These uses extended far beyond the utilitarian and the obvious. Manufactured objects were used to assert new forms of social identity or to announce individual subjectivity. Often these objects were brought together in newly minted social practices that served a number of these purposes at once. A case in point is the drinking of tea, in which the consumption of exotic groceries (tea and sugar) was carried out using imported luxuries (porcelain dishes) and British manufactured goods that aped foreign manufactures (a Staffordshire teapot, for example) in a gathering that also featured novelties such as sugar nippers and ancillary equipment made from ersatz luxury materials (a Sheffield-plate urn, say). The taking of tea in this way became a means of subscribing to a new model of civility that set great store by informality and domesticity and that, by so doing, enabled new conceptions of masculinity and femininity to take shape.

Social identities in Britain and its fast-moving Atlantic empire were notably fissile, fueling the demand for novelty. Product innovation therefore gave rise to a process of elaboration and differentiation: individual product types spawned variants, which spawned entire subfamilies. This was the outcome of a dynamic interaction among manufacturers, merchants, and consumers. New product lines were tried out and product ranges were regularly refreshed. Merchants took a keen interest in testing consumer reaction and were a key source of information for manufacturers whose own knowledge of distant markets was sketchy at best.¹¹

This is an explanatory framework that works most effectively with what contemporaries called “decencies.” These were articles that added to the comfort of life or the social standing of their owners; they were bought by individuals who could exercise a certain degree of personal freedom. Indeed the exercise of choice is essential in explaining the proliferation of goods and the turnover of designs. But what of an article that was “consumed” by people who could not freely choose? What can be written of an object that added nothing to the comfort of life and conferred no prestige on its owner? The plantation hoe sets that challenge. As indicated above, there is clear evidence that hoes used in Virginia changed in form during the century 1650–1750. They have a design history that requires explanation.

¹¹ Of particular relevance here are Kenneth Morgan, “Business Networks in the British Export Trade to North America, 1750–1800,” in *The Early Modern Atlantic Economy*, ed. John J. McCusker and Morgan (Cambridge, 2000), 36–62; John Smail, *Merchants, Markets and Manufacture: The English Wool Textile Industry in the Eighteenth Century* (London, 1999).

Such a history involves tracing the expanding market for hoes in the British Atlantic during the seventeenth century and the evolution of distinct types, each intended for a specific colonial market. As hoe production in Britain grew through the eighteenth century, manufacturers continued to elaborate new models. The process of redesign was not one that tailed off; it continued unabated, with mechanisms that allowed for the continuous adaptation of this humdrum instrument. The plantation hoe showed astonishing vitality as a good, yet it was never an article that garnered cultural esteem. Indeed, toward the end of the eighteenth century, it began to attract outright hostility. The ideological suspicion that fell on the plantation hoe in the young American Republic and the British Caribbean caused an article that was a virtual badge of office for generations of enslaved laborers to slide into historical obscurity. Yet if the hoe is restored to visibility, it can perform a valuable historiographical service: it can call into question the standard explanatory framework used in histories of consumption in the early modern Atlantic.

THE HOE WAS PRODUCED in vast quantities. It had to be. There was a steadily advancing plantation frontier to be supplied. The English had three theaters of plantation agriculture: the Chesapeake, the low country, and the sugar islands. In each, the number of captive laborers spiraled upward in the late seventeenth and early eighteenth centuries. There were just 3,000 slaves in Virginia in 1680, making up a very minor part of the workforce. By 1750, there were more than 107,000 slaves in the Old Dominion, equal to 46 percent of the total population. The transformation of South Carolina was equally startling. Just 200 slaves were present at the time of the colony's foundation in 1670; there were 39,000 in 1750. As for the Caribbean, slave numbers reared up. There were already many tens of thousands at work in the late seventeenth century, but by the middle of the next century, there were more than 250,000. The market for hoes was therefore immense.¹² It was also self-sustaining. Neither manufacturers nor consum-

¹² Ira Berlin, *Many Thousands Gone: The First Two Centuries of Slavery in North America* (Cambridge, Mass., 1998), 369–70; Richard B. Sheridan, “The Formation of Caribbean Plantation Society, 1689–1748,” in *The Oxford History of the British Empire: The Eighteenth Century*, ed. P. J. Marshall (Oxford, 1998), 394–414, esp. 400. The extent of the hoe market cannot be charted precisely. Data collected by the British state on exports to the colonies begin only in the 1690s, and the categories used are not helpful. Hoes would have been itemized as “wrought iron,” a spacious category that included ironmongery of all sorts except nails and barrel hoops. “Wrought-iron” exports are not, then, a satisfactory proxy for hoe shipments. What the data from the British National Archives CUST 3 ledgers do make plain, however, is that the Caribbean was consistently and by a huge margin the most important market for British-made hardware. Wrought-iron exports to the West Indies came to 1,354 tons in 1751; those to the Chesapeake totaled 190 tons, whereas the low country absorbed 207 tons.

ers expected that such an intensively used tool would last longer than a year. Constant replenishment was necessary.

Some notion of the scale of production can be had from the Crowleys, the preeminent manufacturers of the eighteenth century. Ambrose Crowley established a set of metalware factories in the northeast of England between the 1680s and 1710s. From the outset they catered to Atlantic markets, and by the 1720s the capacity of the Crowley works was enormous. When the firm's depot at Greenwich, downstream on the Thames from London, was inventoried in 1727, there were 23,050 Virginia hoes in stock. Thousands of others were packed, ready for shipment to the sugar islands (Figure II).¹³

Swedish traveler Reinhold Angerstein, who toured the Crowley works in the 1750s, left a detailed description of the manufacturing procedure. There were twenty-two hoe-making shops at Swalwell, each with three workers: a master and two hammermen. Three dozen hoes were made at each shop daily. The hoes were principally made of bar iron, but each one had to have a durable steel edge if it was to stand up to the rigors of the colonial frontier. Steel plates were prepared for this purpose in a separate suite of workshops. Once beaten into shape, the hoes were finished off at a grinding mill, where they were sharpened and polished.¹⁴ This was high-volume, rapid-throughput manufacturing. To Swalwell's twenty-two workshops should be added the twenty-six at Winlaton Mill, plus six more at Teams. Altogether, the Crowleys could put fifty-four hoe shops, with 162 hammermen, to work. They had the capacity to turn out eleven thousand hoes per week.

Angerstein wrote that three basic styles of hoe were manufactured by the Crowleys: the Virginia, the Carolina, and the Barbados. Each was made in broad or narrow form and each in six different sizes (0 through 5, smallest to largest). Each was adapted to one of the different modes of

¹³ On the Crowleys, see M. W. Flinn, *Men of Iron: The Crowleys in the Early Iron Industry* (Edinburgh, 1962). The rise of the English hardware trade and its Atlantic ramifications are addressed in Chris Evans and Göran Rydén, *Baltic Iron in the Atlantic World in the Eighteenth Century* (Leiden, Netherlands, 2007). For the Greenwich depot inventory, see Ashburnham MSS, HAI/GD/5/1, Suffolk Record Office, Ipswich.

¹⁴ Torsten Berg and Peter Berg, trans., R. R. Angerstein's *Illustrated Travel Diary, 1753–1755: Industry in England and Wales from a Swedish Perspective* (London, 2001), 259–62. Angerstein's compatriot J. L. Robsahm visited Swalwell eight years later. He too watched hoes ("implements used in America for cultivating the ground instead of ploughs") being made. Each one was "stealed to half the length. The steel was placed between two pieces of iron and the package then forged to its final shape." See K. C. Barraclough, *Steelmaking before Bessemer*, vol. 1, *Blister Steel: The Birth of an Industry* (London, 1984), 186. Sharpening and polishing were indispensable features of the process. If grinding mills were out of operation, hoe production halted: "The late dry season having put a stop to our Grinding Mills, makes us verry short of hoes." See Robert Plumsted to William Collier, Dec. 7, 1753, Osborn fc 160, Beinecke Rare Books and Manuscripts Library, Yale University.

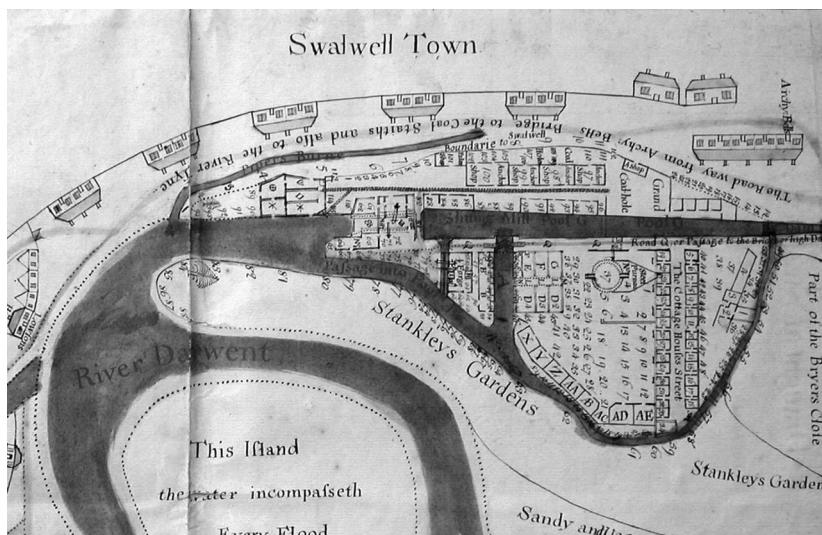


FIGURE II

Detail from DX104/1, Tyne and Wear Archives, Newcastle upon Tyne. Swalwell in County Durham was the largest of a number of works operated by the Crowleys in the northeast of England. The works was built on a bend of the River Derwent, across which a cut was made to hold the penned-back waters that would power a forge and mill. As this plan of ca. 1714 reveals, Swalwell was host to a wide range of processes. At its center stood a cementation steel furnace (shown with its circular footprint picked out in dots but with a bird's-eye view of its conical flue). It was here that the Swedish bar iron made with ore from the Dannemora mine was converted into steel. Adjacent are four anchor shops, a slitting mill, a plating forge, and a variety of smaller shops in which smiths hammered out goods by hand. See also David Cranstone, "From Slitting Mill to Alloy Steel: The Development of Swalwell Ironworks," *Industrial Archaeology Review* 33, no. 1 (May 2011): 40–57. An enhanced, interactive version of the full map is available: <http://oieahc.wm.edu/wmq/supplement.html>.

plantation agriculture practiced in Britain's Atlantic empire: tobacco in the Chesapeake, rice in the Carolina low country, and sugar in the Caribbean. In Virginia it was desirable to have a relatively acute angle between blade and handle, allowing the user to scoop soil into the shin-high mounds in which individual tobacco plants were bedded. (This was why the narrow hoes exported to the tidewater were often referred to as "hilling hoes"; wider "grubbing hoes" were used to turn over the soil.) The Carolina broad hoe, "about nine inches broad in the mouth," was an all-purpose implement for tearing at the earth. The narrow hoe, to which slaves turned once the seed had been planted, was adapted far more closely to the needs of rice growing. It was "made for that purpose, about five or six inches broad in

the mouth," and used to "cut up the grass, or other trash, growing between the said trenches of rice."¹⁵ In the sugar islands, other considerations were paramount. It was essential that blades were specially strengthened to cope with cane holing, the brutally taxing task that occupied field gangs in the planting season. When "*holeing a cane piece*," it was reported, "the slaves, of both sexes, from twenty, perhaps, to fourscore in number, are drawn out in a line, like troops on a parade, each with a hoe in his hand." Each section of the line was stalked by a driver, cart whip in hand.

As the trenches are generally rectilinear, and the whole line of hollers advance together, it is necessary that every hole or section of the trench should be finished in equal time with the rest; and if any one or more negroes were allowed to throw in the hoe with less rapidity or energy than their companions in other parts of the line, it is obvious that the work of the latter must be suspended. . . . The tardy stroke must be quickened, and the languid invigorated; and the whole line made to *dress*, in the military phrase, as it advances. No breathing time, no resting on the hoe, no pause of languor, to be repaid by brisker exertion on return to work, can be allowed to individuals: All must work, or pause together.¹⁶

The demands made on slaves were enormous; so, too, the demands made on their tools. Merchants in Britain despaired of finding hoes that would "stand the unfair strains and wrenches backwards, when struck into the earth that your negroe's give them."¹⁷ The Caribbean was not only the largest and most varied market for British manufacturers; it was the most challenging (Figure III).

The 1726 inventory of Robert Plumsted, a major London ironmonger, gives some clue as to how manufacturers responded.¹⁸ It reveals a more elaborate differentiation than the tripartite Virginia-Carolina-Barbados division of Angerstein. Sure enough, there were Barbados hoes, broad and narrow, but West Indian planters were also being offered a selection of reinforced tools. The "high Creas'd," or high-crested, hoe, which had

¹⁵ "An Interview with James Freeman, 1712," in *The Colonial South Carolina Scene: Contemporary Views, 1697-1774*, ed. H. Roy Merrens (Columbia, S.C., 1977), 38-55 (quotations, 45).

¹⁶ James Stephen, *The Crisis of the Sugar Colonies; or, An Enquiry into the Objects and Probable Effects of the French Expedition to the West Indies; and Their Connection with the Colonial Interests of the British Empire to Which Are Subjoined, Sketches of a Plan for Settling the Vacant Lands of Trinidad* (London, 1802), 9-11 ("holeing," 9, "slaves, of both sexes," 10, "As the trenches," 10-11).

¹⁷ Quoted in C. A. J. Skeel, "The Letter-Book of a Quaker Merchant, 1756-8," *English Historical Review* 31, no. 121 (January 1916): 137-43 (quotation, 138).

¹⁸ I owe this reference to Liliane Pérez.

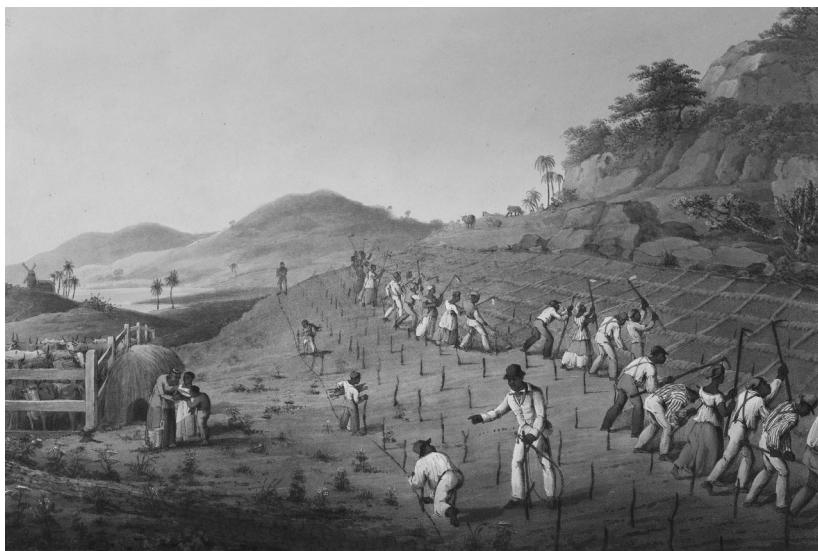


FIGURE III

"Holeing a Cane-Piece" on Antigua, ca. 1820. The regimented character of the labor process is clear enough, as is the kinetic force with which the hoe was brought down from above head height. See W. A. V. Clark, *Ten Views in the Island of Antigua, in which are represented the Process of Sugar Making, and the employment of the Negroes, in the field, boiling-house and distillery* (London, 1823), plate 2. © British Library Board (1786.c.9). A color version is available: <http://jstor.org/stable/10.5309/willmaryquar.69.1.0071/>.

a raised spine to lend extra rigidity to the blade, was one response to the rock-hard, compacted earth that confronted field gangs in the dry season (Figure IV). Makers experimented with others, boosting the ratio of steel to iron in their products or tempering the metal more thoroughly. Thus one absentee planter shipped out "Extra-high temper'd" hoes to his Antiguan estate in 1750, whereas a Jamaican ordered both "extra Steel Hoes" and "best steel Hoes" for his plantation in the dusty east of the island.¹⁹

¹⁹ "Invoices & Bills of Ladeing shipt for . . . the use of Parham Plantation for the year 1750," DD/TD/13, Somerset Archives, Taunton ("Extra-high temper'd"); "Invoice of Sundries Shipped on board the Port Morant," Sept. 7, 1772, Slebech 11726, National Library of Wales, Aberystwyth ("extra Steel"); "Messrs Hibbert Purrier & Horton, London Septr 22nd 1772, Bo[ugh]t of James Sharpe," Slebech 11704(a), ibid. ("best steel"). For high-tempered hoes, see: "Invoices & Bills of Ladeing shipt for . . . the use of Parham Plantation for the year 1750," DD/TD/13, Somerset Archives; and see Stapleton-Cotton Manuscripts 7, University College Bangor Archives, for the shipment of "high tempd hoes" to Nevis (invoice dated Oct. 1, 1780) and Saint Kitts (invoice dated Oct.

		mano	do	2
	1	do	3	3
	3	High Creas'd. doos	N° 1	
	1	-		
	5	-	Nevis Child[re]ns doos	2
	3	-	Barb. Bros	N° 1
	6	-		2
	2	6		3
	3	-	Crowley doos	N° 2
	4	-		3
	2	6	Barb. Nevis doos	N° 2
	2	5	do	3
	-	1	Broad Bl'd do	N° 2

FIGURE IV

Detail from The National Archives of the U.K., ref. PROB 3/26/55. The postmortem inventory of Robert Plumsted, London ironmonger, indicates how hoes might be distinguished by manufacturer ("Crowley"), by intended market (Barbados or Nevis), by special physical features ("high Creas'd"), or by intended user (male or female, adult or juvenile).

Makers also began to offer a more varied range of hoes so that planters could maximize the exploitation of their enslaved labor force. The "Nevis Child[re]ns hoe" stocked by Plumsted was an early indication of this. Hoes began to be adjusted to the exact physical abilities of each sex and every age group, allowing the last particle of available labor power to be extracted. Planters ordered truly miniature implements for infants (a Barbadian was disappointed to be told that "we have no Children hoes made smaller than No 0") and issued a boy's or girl's hoe to more mature juveniles.²⁰ The availability of women's hoes allowed an intensification of female field labor, a consideration of great importance as the sex ratio among Caribbean slave workforces shifted toward a female majority in the later decades of the eighteenth century.²¹

Brand reputation counted for much in the burgeoning Atlantic marketplace, as historians of eighteenth-century consumption have underlined.

3, 1791). John Halliday & Brothers imported both standard and "best high tempd Hoes" into the Leeward Islands. The high-tempered variety made up more than 70 percent of the total (John Halliday & Bros to Robert Plumsted, Oct. 20, 1753, loose-leaf inclusion in Plumsted's letter book, Osborn fc 160).

²⁰ Robert Plumsted to William Collier, July 31, 1753, Osborn fc 160.

²¹ Richard S. Dunn, "'Dreadful Idlers' in the Cane Fields: The Slave Labor Pattern on a Jamaican Sugar Estate, 1762–1831," *Journal of Interdisciplinary History* 17, no. 4 (Spring 1987): 795–822, esp. 812; B. W. Higman, *Slave Populations of the British Caribbean, 1807–1834* (Kingston, Jamaica, 1995), 115–20.

But this was not only true for the fancy goods that have attracted most scholarly study. There was a brand hierarchy for hoes as well. Plumsted's appraisers singled out Crowley hoes for special mention. They were right to do so, for Crowley products enjoyed transoceanic prestige. In 1742 a Charleston merchant advised his London correspondent that the standard assortment of goods for the low country had to include "Crowleys best Broad & Narrow Hoes."²² A Kingston merchant did likewise in 1758. He insisted that "300 dozen Crawleys hoes no. 2"—no others—be sent out to Jamaica on his account.²³ The Crowley brand was so strong that new entrants to the trade believed that the route to success lay in copying the Crowley designs and, if at all possible, poaching the Crowley workforce: "we want patterns of Crowley's hoes Viz the Largest & most approved kinds," the Carron Company, newly established in Stirlingshire, Scotland, told its London agents.²⁴ Meanwhile, potential clients were assured that "our Men are from Crowley's Works & we have reason to believe the Hoes they make are in every respect as compleat as Crowley's."²⁵

The Crowleyes were preeminent, but they had no monopoly. There were rivals such as the spin-off firm of Crowley Hallett & Co, which adopted the same mode of operation: factories in the northeast and a depot on the Thames from which metalwares were dispatched to transatlantic markets.²⁶ William and George Jukes also seem to have enjoyed a considerable reputation in the 1730s and 1740s. "Mr Jukes of whom I bought the Iron ware has . . . the reputation for making the best hoes," a London merchant told some tidewater clients (albeit when apologizing for the nondelivery of goods).²⁷ The manufacture was not restricted to the

²² Walter B. Edgar, ed., *The Letterbook of Robert Pringle*, vol. 1, April 2, 1737–September 25, 1742 (Columbia, S.C., 1972), 50.

²³ William Miles to Henry Bright, Apr. 24, 1758, in Kenneth Morgan, ed., *The Bright-Meyler Papers: A Bristol–West India Connection, 1732–1837* (Oxford, 2007), 333–35 (quotation, 334). The same preference can be seen in Virginia. Several examples are quoted in Patricia Ann Gibbs, "Agricultural Implements and Vehicles Used on Plantations in Tidewater Virginia, 1700–1776" (unpublished Colonial Williamsburg Foundation Library Research Report, 1976), 1: 94, 97.

²⁴ Carron Company to Adam & Wiggins of London, January 1765, GD58/6/1/4, National Archives of Scotland (NAS), Edinburgh. Secrecy was insisted upon; particular care was to be taken lest it "be known [the hoes] are coming here" (*ibid.*). The company also quietly obtained "Virginia Pattern Hoes" made by the Midlands manufacturer Francis Homfray II: see Carron Company to Samuel Garbett, Nov. 22, 1764, *ibid.*

²⁵ Carron Company to John Glassford & Co, November 29, 1764, GD58/6/1/4, *ibid.*

²⁶ See the firm's inventory of 1751 in Asia, Pacific and Africa Collections, MSS Eur F 218/115, British Library, London, and legal papers that detail the partners' plant in CII/822/3, National Archives of the U.K., Kew.

²⁷ Edward Athawes to John and Charles Carter, Mar. 18, 1742, MSS1 C2468a 69, Virginia Historical Society, Richmond. William and George Jukes had extensive manufacturing interests, of which cannon founding is the best documented. See Henry Cleere and David Crossley, *The Iron Industry of the Weald*, 2d ed., ed. Jeremy Hodgkinson (Cardiff, 1995), 200–208.

northeast. The West Midlands was another important source of supply for the Atlantic world. But whereas Crowley and his imitators in the northeast built centralized factories, the English Midlands was dominated by putting-out ironmongers who set an army of dispersed subcontractors in motion. Ironmonger dynasties such as the Homfrays and the Gibbonses issued credit in the form of iron and steel to their outworkers. The smiths, working at lean-to hearths in the straggling industrial villages of the region, returned the finished articles a week later. In Scotland, however, where there was a surge of investment in metalware making in the wake of the Seven Years' War, centralized factories such as that at Carron were dominant.²⁸

The Carron Company archive makes it plain that product innovation and differentiation continued apace in the later decades of the eighteenth century. Feedback from customers was eagerly sought. The company's largest customers were the great tobacco houses of Glasgow, most of which had stores in the tidewater at which the cured leaf could be exchanged for manufactured goods. The storekeepers, salaried employees of the Glasgow houses, acted as conduits—and most efficient ones—for information on market conditions and customer preferences in the Chesapeake. When storekeepers complained, the Carron Company responded with alacrity. "It gives us great pleasure," the company told Cunningham & Co, one of Glasgow's biggest tobacco syndicates, "to hear that your friends in Virginia approves of the quality of the Hoes": "You may depend that the utmost attention shall be given to remedy the defects pointed out by your Mr WC—& which is already done in the particular of the Hoes, being Strong in the Shoulders—tapering to the point—Such advice we Shall always esteem an Act of Friendship as it is our Earnest Wish to have the quality of all our Goods as perfect as possible."²⁹ Through this kind of dialogue, the product was amended and refined.

Product innovation also took the form of hoes designed for specific parts of the Caribbean—hence the hoes earmarked for Nevis in Plumsted's warehouse or the Jamaica hoe that makers were soon offering as an item

²⁸ George Thomson, "The Dalnotter Iron Company: An Eighteenth-Century Scottish Industrial Undertaking," *Scottish Historical Review* 35, no. 119 (April 1956): 10–20; R. H. Campbell, *Carron Company* (Edinburgh, 1961); Marie B. Rowlands, *Masters and Men in the West Midlands: Metalware Trades before the Industrial Revolution* (Manchester, 1975).

²⁹ Carron Company to William Cunningham & Co, July 15, 1767, GD58/6/1/6, NAS. "Mr WC" was presumably the William Cunningham employed at Falmouth, Virginia. The firm had fourteen stores on different branches of the Chesapeake on the eve of the Revolution. Falmouth, on the Rappahannock River, was the chief of these. See T. M. Devine, ed., *A Scottish Firm in Virginia, 1767–1777: W. Cunningham & Co.* (Edinburgh, 1984), 4, 26, 48–49, 65–67; see also Devine, *The Tobacco Lords: A Study of the Tobacco Merchants of Glasgow and Their Trading Activities, c. 1740–90* (Edinburgh, 1975), chap. 4, for the evolution of the "store system."

distinct from the old Barbados model. Others were to follow. British military and commercial success in the middle of the eighteenth century gave rise to a further elaboration of Caribbean hoe types. The Demerara hoe made its debut at this time. Why British manufacturers began to make a distinct Demerara hoe is not certain, but it was surely related to mounting British influence in that South American Dutch colony. In 1746 the Dutch West India Company opened Demerara to foreign settlement, reversing a long-standing prohibition. British planters from soil-depleted Antigua and Barbados rushed in; British merchants followed in their wake, importing—or rather smuggling in—British manufactured goods.³⁰ Evidently, the British newcomers were willing to adapt to local proclivities in the matter of tool design. They did not attempt to flood new markets with established models (Figure V).

The Carron Company, having first established itself in the Virginia market, turned its attention to the West Indies in the late 1760s. Specimen hoes of the sort exported from London and Bristol were procured and copied. Yet the company was concerned with more than the established Caribbean markets in Barbados, Jamaica, and the Leeward Islands; it sought out new opportunities in Britain's most recent acquisitions in the region. By the Treaty of Paris in 1763, France relinquished Dominica, Tobago, Saint Vincent, Grenada, and the tiny Grenadine Islands. The Carron partners took advantage of the fact. "We must desire you will procure us a Sugar Hoe of every kind used in the Grenad[in]es," they told their London agents.³¹ Once again, there was a willingness to attend to variations in local tastes and traditions. The Carron management simply assumed that there would be significant local variation—that the Grenadines would have different requirements to those of Barbados, only 120 miles to the east.

³⁰ When Robert Bull advertised the services of his "New Smith & Wright Work Manufactory" at Leith, Scotland, ca. 1750, he offered both Jamaica and Demerara models for sale, as well as the usual Carolina and Virginia models. See *Tradesmen's Lists*, John Johnson Collection of Printed Ephemera, Bodleian Library, Oxford. On Demerara, see Eric Willem van der Oest, "The Forgotten Colonies of Essequibo and Demerara, 1700–1814," in *Riches from Atlantic Commerce: Dutch Transatlantic Trade and Shipping, 1585–1817*, ed. Johannes Postma and Victor Enthoven (Leiden, Netherlands, 2003), 323–61; and, for a case study of one merchant-planter, S. D. Smith, "Gedney Clarke of Salem and Barbados: Transatlantic Super-Merchant," *New England Quarterly* 76, no. 4 (December 2003): 499–549.

³¹ Carron Company to Adam Wiggin & Co, Nov. 18, 1768, GD58/6/1/8, NAS. The issue was made more complex because sugar monoculture had never taken hold in the Ceded Islands; coffee, cocoa, cotton, and indigo as well as cane had been raised under the French regime. It was a market worth attending to, however. In 1771 the Ceded Islands imported 996 tons of British ironmongery, more than a quarter of the Caribbean total for that year (CUST 3/71, National Archives).

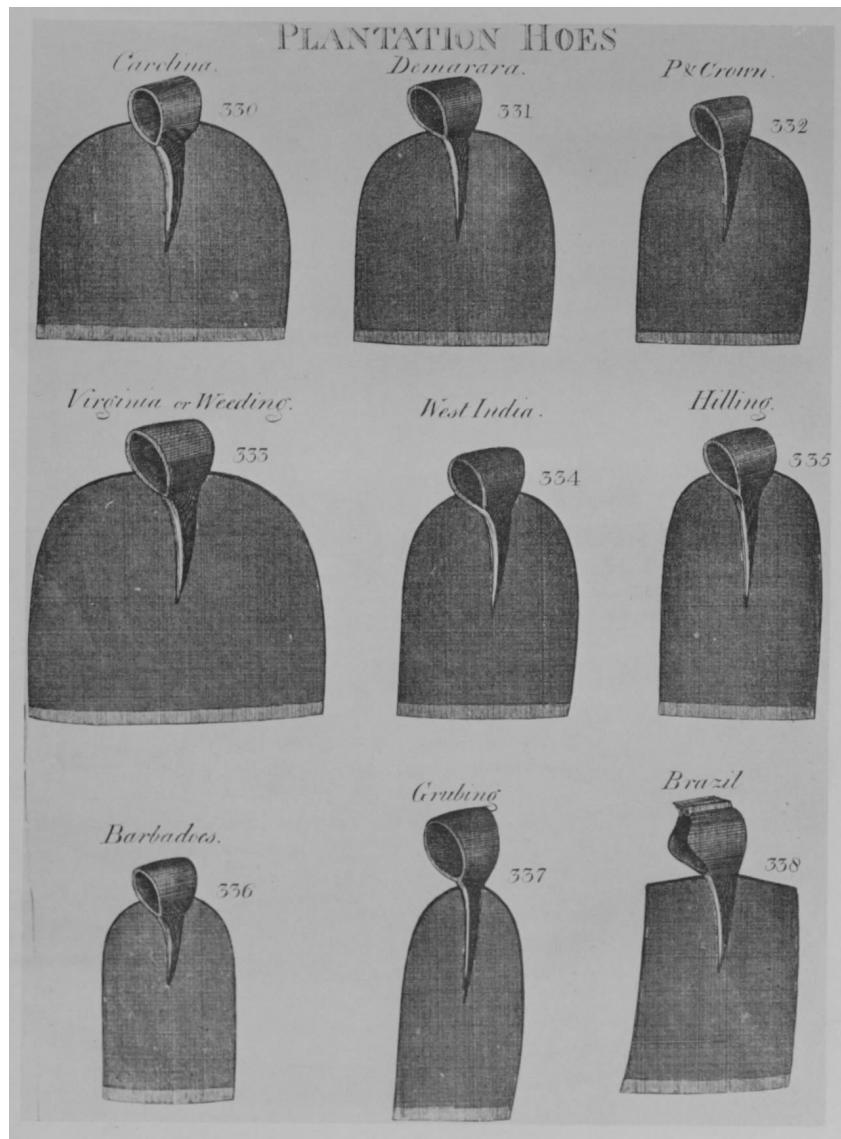


FIGURE V

An 1816 catalog of Sheffield products shows both the Barbados and the Demerara models: the latter has a wider blade and a more elongated neck between the blade and the eye. Joseph Smith, *Explanation or Key, to the Various Manufactories of Sheffield, with Engravings of each Article* (1816), ed. John S. Kebabian (South Burlington, Vt., 1975). Reproduced by permission of the Early American Industries Association.

Although the major manufacturers had the capacity to turn out hoes in enormous quantity, there is good reason to think of hoes as bespoke goods. Colonial customers were often very exact in their commands. When ordering a batch of hillling hoes in 1758, Virginia storekeeper Francis Jerdone did not spare on detail. "I beg leave to trouble you again to get 3 doz: made with Eyes exactly the same as grubbing hoes: the blades to be made as the others were & to be kept up to the full breadth & length & made tapering from the shoulder to the Edge, with a pound of steel in each."³² Indeed planters often furnished their merchant correspondents in Britain with sample tools or wooden facsimiles that showed what features the finished tool should have. Elias Ball, a low-country rice planter exiled in Britain after the American Revolution, sent out plantation goods to a patriot cousin who remained in South Carolina. He assured his cousin that he could get broad hoes "made to any pattern you shall send if you will get your Carpenters to make a pattern in wood Exactly the Size thickness &c they shall be made agreeable to it."³³ This was not at all unusual. Just as a gentleman of means would have a pair of lasts at his bespoke shoemaker, so a planter would leave "patterns" with his suppliers in London, Liverpool, or Bristol. Failure to respect the pattern brought as swift a rebuke as transatlantic communication would allow. "The Hoes you sent are come inn of the right size and are very good," a Virginian complained in 1772, "but the Eyes are not shaped as the old Hoe sent a pattern are."³⁴

By the end of the eighteenth century, the hoe had achieved astounding variety. There were hoes for different crops and different regions, hoes for individual islands, even for individual plantations. Hoes were broad or narrow, each in several gauges. There were models that were sex-specific or age-specific. Special features giving extra robustness to the tool could be asked for: high crests, for example, or welded eyes. Planters could specify how well steeled their hoes were to be or the extent to which the steel was tempered. They could select the finish applied to the blade: bright, half-bright, or black. There was no lack of consumer choice. Elaboration and

³² Francis Jerdone to Tappenden & Hanbey, Sept. 8, 1758, Jerdone Family Papers, box 15, Ms.V 9, Special Collections, Earl Gregg Swem Library, College of William and Mary, Williamsburg, Va.

³³ Elias Ball IV to Elias Ball III, Apr. 21, 1786, Ball Family Papers, box 1, folder 7, South Caroliniana Library, University of South Carolina, Columbia. Elias Ball the loyalist lived at Frenchay, just outside Bristol, where a small forge was in operation; see Owen Ward, "Frenchay Iron Company, 1776–1780," *Bristol Industrial Archaeology Society Journal* 30 (1997): 25–33. This allowed him to have axes, hoes, and spades prepared "under my own Eyes" (Elias Ball IV to Elias Ball III, June 1, 1791, Ball Family Papers, box 1, folder 11).

³⁴ Young Mourland to John Norton and Son, Aug. 5, 1772, John Norton and Sons Papers, MS 1936.3, folder 68, John D. Rockefeller, Jr. Library, Special Collections, Colonial Williamsburg Foundation, Williamsburg, Va.

diversification continued far into the nineteenth century. According to the *Illustrated Sheffield List* for 1878, a compendious guide to metal goods made in the city, Carolina hoes could be had in six different finishes and eight sizes, beginning with the “oooo” and ending with the “4,” a monster measuring 9 ½ by 10 ½ inches. In all, there were 48 options.³⁵ Lest this seem excessive, the Brazil hoe came in still more exuberant variety: 165 options.

THERE WAS, THEN, more to the hoe than at first meets the eye. This disregarded field implement, apparently so removed from the consumer ebullience of the British Atlantic, shared key characteristics with loftier goods. The processes that are celebrated as the hallmarks of a new model of production and consumption in the eighteenth century—product innovation, elaboration, differentiation—applied to the hoe as well. The hoe may have lacked the eye-catching qualities of the small, affordable, petty luxuries that have attracted so much historical attention, but it embodied some of the same underlying features. Its manufacturers sought out and served niche markets with great success. They developed high-volume yet flexible production systems. They engaged in adaptive redesign by means of a dialogue with their customers.³⁶ As a consequence, the plantation hoe was a dynamic good, evolving steadily over time.

The mechanisms that allowed manufacturers to track changes in consumer preferences are reasonably clear: slicker information flows in the Atlantic world during the eighteenth century. The quality of that information improved in tandem. Makers issued catalogs of their goods to export merchants; in return, they accepted patterns or specimen tools to copy. But if the mechanisms for change and adaptation are plain enough, the motor that drove changes in design remains elusive. That the tripartite division of plantation hoes into the Virginia, Carolina, and Barbados varieties stemmed from the different forms of cultivation practiced in each of those colonies seems plausible. But what distinguished the Barbados hoe from the Jamaica? Both were used in cane fields. And why was a separate type of hoe thought necessary for Demerara, another sugar colony? European tradition must have intruded in some way. Until the British acquired a presence in Demerara, supplying the colony was a monopoly of the Dutch West India Company, which would have sourced its metalwares from the hardware-producing districts that were linked to the Netherlands via the

³⁵ Edward Brookes, *The Illustrated Sheffield List* (Sheffield, 1878), 186. A copy is available at the Ken Hawley Collection Trust, University of Sheffield.

³⁶ There is a direct parallel with the making of agricultural implements in nineteenth- and twentieth-century Britain, where manufacturers focused often on very small niche markets that they could dominate. See E. J. T. Collins, “Agricultural Hand Tools and the Industrial Revolution,” in *Land and Society in Britain, 1700–1914: Essays in Honour of F. M. L. Thompson*, ed. Negley Harte and Roland Quinault (Manchester, 1996), 57–77.

Rhine and Maas river systems. Perhaps the British-made Demerara hoe was inspired by what had long been furnished by Walloon and German manufacturers.³⁷

British manufacturers were willing to respect consumer choice, but that begs the question of which consumers: the planters or their slaves? The planters were able to exercise choice unhindered. It was their business to ponder tool design, and many took pride in doing so, as the papers of planters such as George Washington and Thomas Jefferson can attest. Yet their human chattels were not without choices of their own. Those choices were hedged about with great difficulty and had to be made in an oblique fashion, but evidence of them survives, for example, in the ways that slaves embellished the drab clothing issued to them.³⁸ In fact, Africans who found themselves confronted by European goods routinely used them in ways unanticipated by their manufacturers. Was this the case with hoes and other articles of farming equipment?

Certainly, there was scope for slaves to put their own imprint on the hoes they used. On a point of accuracy, the hoe should not be spoken of as a British manufactured good; it was a semimanufactured article whose final assembly took place outside Britain. Only the iron-steel head was exported; the handle was fitted on-site in the Americas. This allowed local users some latitude in determining the final form of the tool. How long should the shaft be? And at what angle should it be wedged into the eye? Decisions taken at this point had a major bearing on how the hoe was grasped and handled, on how the passive object was changed into an active instrument of environmental and social transformation. This did not mean that slaves were at liberty to transform the European-made hoe into something more akin to its African equivalent. The physical differences between the European and African patterns were too great. Traditional hoes in West and West-Central Africa were varied in form, but they seldom corresponded to those exported from Britain. In West-Central Africa, the head of the hoe was secured to its wooden handle by a spiked extension to

³⁷ The Carron Company distributed “a Catalogue of the Goods we make for Exportation” in the 1760s (Carron Company to Messrs William Alexander & Sons, May 18, 1768, GD58/6/1/7, NAS), but no copy has survived. Different national styles of tool making are considered in James M. Gaynor, “Seventeenth- and Eighteenth-Century Woodworking Tools: The Evolution of a British Style,” *Tools and Trades* 14 (2005): 1–29.

³⁸ Thomas Jefferson’s interest in plows extended to designing a new model of his own. See Edwin Morris Betts, ed., *Thomas Jefferson’s Farm Book* (Charlottesville, Va., 1987), 47–64. On slave clothing, see Linda Baumgarten, “Clothes for the People: Slave Clothing in Early Virginia,” *Journal of Early Southern Decorative Arts* 14, no. 2 (November 1988): 26–70; Philip D. Morgan, *Slave Counterpoint: Black Culture in the Eighteenth-Century Chesapeake and Lowcountry* (Chapel Hill, N.C., 1998), 125–33.

the blade that was driven into the thickened end of the shaft.³⁹ In British-manufactured equivalents, the shaft was inserted into the eye of the hoe and wedged tight. And so it remained. No concession was ever made to the African alternative (Figure VI).

To concentrate on the form of the tool is to focus on the “hardware” at the expense of the “software.” Yet it was the software—purposeful human action—that gave animation to an otherwise inert object. Marcel Mauss long ago remarked on the culturally specific character of even the most commonplace physical activities. In his 1934 lecture “Techniques of the Body,” he recalled his service in the First World War: the “English troops I was with did not know how to use French spades, which forced us to change 8,000 spades a division when we relieved a French division, and vice versa.”⁴⁰ There was nothing natural or neutral, Mauss realized, in turning over soil. It is useful to consider the hoe with this in mind and to view it as an amalgam of object and action. Its design history has to take into account the stance of field hands as they swung the hoe, the position of their hands on the shaft, their posture as the hoe bit into the earth and as they pulled it free, their gait as they moved forward or backward, and the pattern of their breathing, along with many other details of gesture and carriage. These characteristics might have stemmed from ingrained habits, which can only be understood through the study of African antecedents in all their variety.⁴¹ Yet it would be extraordinary if the deportment of field laborers did not also betray the influence of the European master class and the example of indigenous peoples (in British North America, at least, if not in the Caribbean). Understanding this presents a daunting methodological problem. The written record is sparse, for the exertions of field hands in the Americas did not much concern the planters—not in their ergonomic aspects, at least. As for the archaeological remnants of hoes, whose handles are long perished along with those who once grasped them, they reveal much about methods of manufacture but rather less about

³⁹ According to William Tatham, the author of *An Historical and Practical Essay on the Culture and Commerce of Tobacco* (1800), “by means of a moveable wedge which is driven into the eye of the hoe, [the blade of the hoe] can be set more or less digging (as it is termed).” See G. Melvin Herndon, *William Tatham and the Culture of Tobacco* (Coral Gables, Fla., 1969), 12. I am grateful to Thomas E. Davidson, senior curator at Historic Jamestowne, for advice on the African patterns.

⁴⁰ Marcel Mauss, “Techniques of the Body,” in Nathan Schlanger, ed., *Marcel Mauss: Techniques, Technology and Civilisation* (Oxford, 2006), 79.

⁴¹ To describe Africans simply as “people of the hoe” is, of course, to do a disservice to the range and complexity of African agricultural practices and to ignore the use of other tool types, such as the fulcrum shovel employed along the “Rice Coast” of Upper Guinea. See Yasmine Marzouk, Christian Seignobos, and François Sigaut, eds., *Outils aratoires en Afrique: Innovations, normes et traces* (Paris, 2000); Edda L. Fields-Black, *Deep Roots: Rice Farmers in West Africa and the African Diaspora* (Bloomington, Ind., 2008).

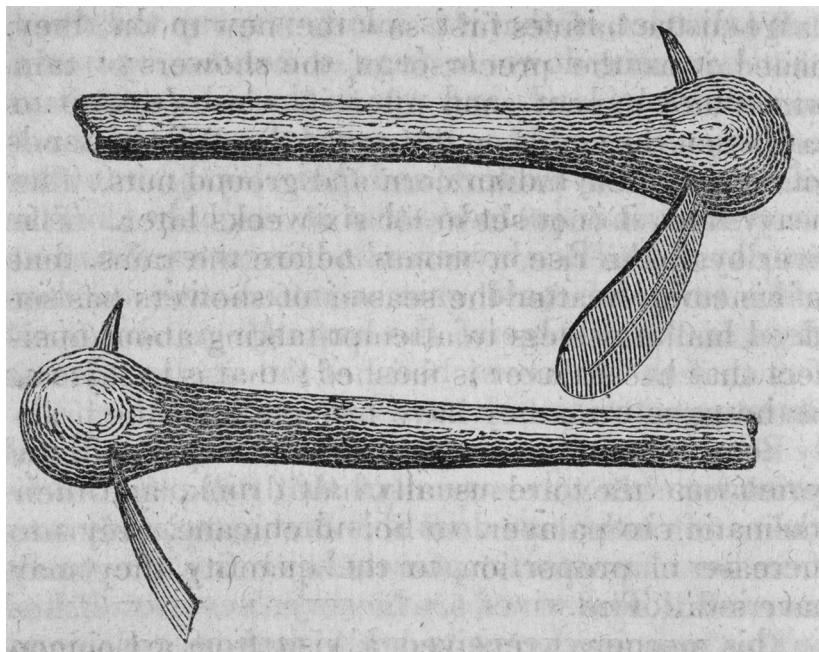


FIGURE VI

Hoes from West-Central Africa at the start of the nineteenth century, as pictured by a British naval officer. "The hoe is their only instrument of husbandry, and is made out of a piece of flat bar iron beat out and stuck into a handle from one to two feet in length." Note not only the distinctive way in which the blade was fixed to the handle but also the handle's shortness. *Narrative of an Expedition to Explore the River Zaire, Usually Called the Congo, in South Africa, in 1816, under the Direction of Captain J. K. Tuckey, R.N.* . . . (New York, 1818), 215–16. © British Library Board (G.15739).

usage. A painstaking retrieval of differing plantation contexts is required, making use of the broadest range of archival and artifactual evidence.

THE QUESTION POSED at the start of this essay—why has the plantation hoe failed to attract historical attention?—might then be reversed. Is it too mischievous to ask why the hoe is not celebrated as one of the major success stories of British manufacturing in the eighteenth century? There are, of course, very good reasons why the hoe does not excite attention. It is confessedly dull, with no obvious aesthetic dimension. So, whereas many quotidian objects of the past have now become collectible—Georgian woodworking tools, for instance—the hoe has no connoisseurs. Yet there is more to its historical eclipse than that. By the early nineteenth cen-

tury, what had formerly been recognized as an instrument of great utility (although not beauty) had come to be seen as something discredited and regressive. In each of the three plantation economies discussed here—the Caribbean, the low country, and the Chesapeake—the hoe continued to be used in huge numbers. Indeed the hoe was circulating in rapidly growing numbers during the early nineteenth century as plantation agriculture expanded across the New World. Yet despite its continued heavy use, the hoe was increasingly seen as disreputable in the Anglophone Atlantic. The reasons are different in each case, but the trajectory is common.

To take the Chesapeake first, disdain for the hoe had its origins in a slow drift away from tobacco by planters. Soil exhaustion and periodically low tobacco prices drove numbers of them to switch to the cultivation of grains—first corn and then wheat—for which there were expanding markets locally, in the West Indies, and in Europe. The change can be detected as early as the 1730s among large and middling planters whose slave work-forces could be exploited more intensively under a diversified agricultural regime. The acreage given over to corn increased during the 1740s and 1750s and, after the Seven Years' War, wheat surpluses became an important feature of the Chesapeake economy. Some planters abandoned tobacco altogether; George Washington, for example, harvested his last crop in 1767. The transition was not straightforward—plowing required draft animals, and they depended on extensive pasturage, which many small plantations could not provide—but by the time of the Revolution, the movement away from tobacco had become general. The mode of cultivation changed in tandem with the switch in the crop: the hoe gave way to the plow. The plow was only partially integrated into corn production; it was used to turn over old tobacco fields, but the hoe remained the implement of choice for tending the plants. Wheat, on the other hand, was plow based.⁴²

Because the switch to wheat accelerated at a moment of heightened political tension in the Chesapeake, it became imbued with ideological significance. A conviction grew on the eve of the Revolution—particularly among those planters who were heavily indebted to British merchants—that the passing profits to be made in the export of tobacco added nothing to the Old Dominion's prosperity. On the contrary, by allowing colonists to indulge themselves with British-made manufactures, tobacco ensnared Virginians in the coils of corrupting luxury. The leaf was not just unrewarding; it was reviled as a symbol of Virginia's subjection to Britain. Social evils of every description were attributed to what had once been hailed as the source of

⁴² This paragraph draws on Lorena S. Walsh, *Motives of Honor, Pleasure, and Profit: Plantation Management in the Colonial Chesapeake, 1607–1763* (Chapel Hill, N.C., 2010), chaps. 5, 7, which the author generously allowed me to read ahead of publication. See also Allan Kulikoff, *Tobacco and Slaves: The Development of Southern Cultures in the Chesapeake, 1680–1800* (Chapel Hill, N.C., 1986), 406–9.

the colony's wealth and prestige. Tobacco was, Thomas Jefferson averred, "productive of infinite wretchedness." A writer in the *Virginia Gazette* added his own lament: "Our Staple Commodity . . . seems completely adapted for restraining the Progress of Population, and of natural Wealth." It was "a mere Luxury, [which] affords no Aliment, extremely impoverishes the Soil, and requires considerable Extent for its Cultivation." Wheat, on the other hand, brought social and political gains. Its progress, one planter thought, had brought contentment to Virginians and made them "independent of British storekeepers who had kept them in debts and dependence." Jefferson concurred: it "diffuses plenty and happiness."⁴³

The embrace of wheat brought about more than a change in the instruments of tillage; it implied a change in how those instruments were valorized. The hoe was servile, not in the sense that it was the tool of black slaves but in that it symbolized the enslavement of planters—their imagined enslavement, that is, by the tyrannical George III. The plow, by contrast, was held up as an emblem of sturdy republican virtue. When he became a wheat farmer rather than a tobacco planter, a tidewater gentleman could picture himself anew as a New World Cincinnatus, as adept at following the plow as he was at defending the commonwealth against its enemies. The hoe belonged to an era of colonial subjection; the plow was the proud embodiment of a new nation.⁴⁴ Changes in agrarian practice and in politics, in other words, turned the hoe from a neutral implement into something suspect.

A parallel process was already under way in South Carolina. The low country had been a latecomer to the plantation world. The first two decades after settlement began in 1670 saw a thin white population dedicate itself to trading with Indians for animal skins or processing lumber for export to the sugar islands. There was no scope for growing tobacco that could compete with Virginia's or for growing sugar that could match Barbados's. A staple crop with which the young colony could force its way into the Atlantic economy was wanted. The problem was resolved in the 1690s with the rapid spread of rice cultivation along the Ashley and Cooper river systems.⁴⁵ "The Country abounds every where with large Swamps,"

⁴³ Thomas Jefferson, *Notes on the State of Virginia* (New York, 1964), 159, quoted in T. H. Breen, *Tobacco Culture: The Mentality of the Great Tidewater Planters on the Eve of the Revolution* (Princeton, N.J., 1985), 206 ("productive," "diffuses"); *Virginia Gazette* (Purdie and Dixon), Aug. 5, 1773, quoted in *ibid.*, 200 ("Our Staple Commodity"); John Beale Bordley, *Essays and Notes on Husbandry and Rural Affairs* (Philadelphia, 1801), cited in Cary Carson, "Homestead Architecture in the Chesapeake Colonies" (paper presented at the 41st Conference in Early American History, Millersville State College, Millersville, Pa., April 1981), quoted in *ibid.*, 206 ("independent of British storekeepers").

⁴⁴ A plow appears on the seal of sixteen American states; the hoe features on just one. My thanks go to Doug Mayo for pointing this out.

⁴⁵ Peter A. Coclanis, *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country, 1670–1920* (New York, N.Y., 1989), chap. 3.

wrote one early governor of the province, “which, when cleared, opened and sweetened by Culture, yield plentiful Crops.”⁴⁶ For this, thousands of slaves were needed, hence the abrupt transformation of the low country into a fully fledged slave society. Blacks had been a very minor presence in the 1670s, but by 1720 they made up 70 percent of a much-expanded population.⁴⁷ Aside from the ax, which was essential for the preliminary felling of timber, the basic tool of the slave pioneers was the hoe: the broad hoe used for hacking into the sodden ground and the specialized narrow hoe with which slaves, all through the suffocating low-country summer, chopped away at the competitor grasses that threatened to choke the rice.

This was “inland swamp” rice growing. It was technologically straightforward and usually modest in scale. Plantations might be primitive encampments with fewer than a dozen captive workers. Crude in some respects though it may have been, it was enormously effective in driving Carolina’s plantation economy forward from the 1690s to the 1730s. After faltering in the 1740s, South Carolina’s rice sector surged again in the second half of the century. Some of the resurgence was due to the renewed growth of inland swamp cultivation, but much was due to an expansion of rice growing on different technological foundations. “Tidal irrigation,” centered on the colony’s coastal creeks and lagoons, was quite distinct from the inland swamp model. The new system exploited the rise and fall of the ocean. When the tide rose, the low country’s rivers were unable to drain freely into the Atlantic. The fresh waters that were penned back could therefore be channeled into specially diked rice fields. With the ocean’s ebb, the sluices that had admitted the waters were closed, keeping the fields under continuous, controlled flood. Tidal irrigation involved a wholesale remodeling of the Carolina landscape as massive embankments came to snake around the coastal estuaries and islands. Whereas inland swamp methods had been semivernacular in spirit, rice now took on a monumental aspect. Tidal irrigation had the flavor of a civil engineering project: planned, rational, orderly, and colossal. The capital investment needed to mold the coastal parishes into their new form was huge, favoring the rise of larger plantations. By 1796 it was estimated that a new tidal rice plantation required two hundred cultivated acres, twice that extent of timber, and fifty slaves as standard.⁴⁸

⁴⁶ [James Glen], *A Description of South Carolina . . .* (London, 1761), 6.

⁴⁷ Slave imports are analyzed in Daniel C. Littlefield, *Rice and Slaves: Ethnicity and the Slave Trade in Colonial South Carolina* (Baton Rouge, La., 1981); David Richardson, “The British Slave Trade to Colonial South Carolina,” *Slavery and Abolition* 12, no. 3 (December 1991): 125–72; Kenneth Morgan, “Slave Sales in Colonial Charleston,” *English Historical Review* 113, no. 453 (September 1998): 905–27. For slave society, see Peter H. Wood, *Black Majority: Negroes in Colonial South Carolina from 1670 through the Stono Rebellion* (New York, N.Y., 1975); Morgan, *Slave Counterpoint*.

⁴⁸ Joyce E. Chaplin, *An Anxious Pursuit: Agricultural Innovation and Modernity in the Lower South, 1730–1815* (Chapel Hill, N.C., 1993), 238–39; S. Max Edelson, *Plantation Enterprise in Colonial South Carolina* (Cambridge, Mass., 2006).

Slaves continued to work with the hoe under this new dispensation, just as they had under the old, but the hoe played a less prominent role under tidal irrigation. Unrelenting use of the hoe to control weeds had been characteristic of inland swamp cultivation, but the new water management practices associated with tidal rice reduced the hoe's salience by using floods to suppress weed growth. African labor and expertise had been essential in the first phase of South Carolina's expansion; the enlightened vision of the planter class was the mainspring of the second—or so the planters assured themselves. Hydraulic technology became a matter of keen interest to them in the revolutionary era: "Innovative planters studied Dutch and English methods of draining, diking, and irrigating land."⁴⁹ Sweet water was to be separated from brackish with calculated expertise, not untutored rules of thumb. Through study, the great planters acquired a global vision. One made a comparison of the methods of planting, processing, and harvesting rice in Carolina, Spain, Egypt, Sumatra, and China, publishing the results in tabular form.⁵⁰ Armed with this knowledge, planters believed that they could manipulate nature with precision.

If the plow helped Chesapeake planters articulate a changed social personality, hydraulic mastery served the same purpose for their low-country equivalents. Planters could present themselves as the agents of progress whose enlightened methods had rendered "the work of the negroes less toilsome."⁵¹ It was not so. The endless hoeing of the rice fields during the summer might have been moderated, but the work of ditching and dike construction through the previously slack winter season more than compensated. Moreover, as irrigated fields multiplied along the Carolina coast and down into Georgia during the 1760s and 1770s, the number of hoes in circulation undoubtedly expanded. Yet the hoe was no longer emblematic of low-country rice. The slaves' ordeal went on, but the instrument with which they toiled underwent ideological erasure.

The centrality of the hoe came into question in the sugar islands as well. Many sugar planters, like their low-country brethren, saw themselves as enlightened improvers. "A spirit of experiment has of late appeared," Edward Long announced in his 1774 *History of Jamaica*, "which, by quitting the old beaten track, promises to strike out continual improvements."⁵² The principal improvement that planters envisaged was the substitution of the plow for the hoe. Indeed there was a vogue for it in the late eighteenth century, both in Jamaica ("nearly every estate") and the

⁴⁹ Chaplin, *Anxious Pursuit*, 239.

⁵⁰ "A Table, shewing the comparative modes of planting a Rice-Crop," folded into John Drayton, *A View of South-Carolina, as Respects Her Natural and Civil Concerns* (Charleston, S.C., 1802).

⁵¹ *Ibid.*, 116.

⁵² Edward Long, *The History of Jamaica; or, General Survey of the Antient and Modern State of that Island: With Reflections on Its Situation, Settlements, Inhabitants, Climate, Products, Commerce, Laws, and Government* (London, 1774), 1: 435.

Lesser Antilles.⁵³ The adaptation of the plow to tropical conditions was no easy business, however. One Barbadian planter appealed to industrial sage Matthew Boulton for help in designing an instrument capable of cutting through the hard-baked Caribbean earth.⁵⁴ But breaking up intractable soils depended not only on plow design but also on sufficiently powerful draft animals. The mules and lightweight creole horses available locally were lacking in this respect. Besides, plantation livestock were already committed to other duties (carrying dung to the fields and cane to the mill), and increasing their number would mean converting land from growing cane to growing fodder. Plowing, acknowledged Samuel Martin, whose *Essay upon Plantership* was one of the earliest calls for all-around agricultural improvement, might require “more strength of cattle and horses than our small pastures can sustain.”⁵⁵ Moreover, there were a good many places beyond the reach of the plow, even if beasts of sufficient vigor were present in the number needed. The flattish terrain of Antigua, where Martin had his estate, was well suited to the plow, but that was not true of all islands. The slopes of volcanic stumps such as Nevis or Saint Kitts defied improvers.

These difficulties meant that the progress of the plow was uneven, and in many localities it was reversed during the last years of the century, especially as some of the adverse environmental effects of furrowing the soil became clear. The first years of the nineteenth century saw a renewal of interest, however. The twin threats of slave revolution and abolitionism made planters more conscious of the benefits of ameliorating their slaves’ condition. It was a process in which the plow might figure. Cane holing, the excavation of the low pits in which young shoots were planted, was recognized as murderously hard labor. Plowing, either as an outright substitute for the hoe or as a preliminary to disturb the soil before holing began, could lessen its severity. Adoption of the plow might stave off the premature physical breakdown to which the frontline field laborers were prone and extend slave longevity—and therefore, from the planters’ point of view, slow down the depreciation of their human capital. The matter became urgent after the ending of the British slave trade in 1807. With no further prospect of renewing the workforce with fresh Africans, planters had to consider how best to boost the productivity of their existing slaves. Once again, advocacy of the plow became part of a program of agricultural improvement. The more active recruitment of English plowmen, which was a feature of the post-Napoleonic years, was one symptom of this.⁵⁶

⁵³ J. R. Ward, *British West Indian Slavery, 1750–1834: The Process of Amelioration* (Oxford, 1988), 82.

⁵⁴ Joshua Steele to Matthew Boulton, Nov. 8, 1763, MS 3782/12/23/30, Birmingham Archives. Perhaps, the writer thought, they could enroll “the admirable Genius of Mr Wyatt”—i.e., John Wyatt (1700–1766), the inventor of the flying shuttle.

⁵⁵ Samuel Martin, *An Essay upon Plantership . . .*, 4th ed. (London, 1765), 38n.

⁵⁶ Plowed fields experienced higher moisture loss than land that was hoed and were far more vulnerable to soil erosion. See David Watts, *The West Indies: Patterns*

The practical value of this infusion of English expertise is open to question, but it yielded definite ideological dividends. Because of its association with progressive English husbandry, the plow had the potential to disarm abolitionist critics. Planters could slip off their creole trappings and assume the dignity of gentleman farmers on the English model. They could claim to be mainstream agriculturalists rather than exponents of an aberrant and cruel tropical regime. In the Caribbean, as in the Chesapeake, the plow was identified as the vehicle of modernity; the hoe became correspondingly abject.

The continued—indeed, the growing—use of the hoe across the plantation world did nothing to alter the negative associations that were now attached to it. In fact, the degradation of the hoe seemed to deepen in step with the implement's spread in the nineteenth century, not least because that spread was most conspicuous in the cotton South at a time of sharpening sectional division in the United States. The advance of cotton cultivation through Alabama and Mississippi in the 1820s and 1830s depended on the hoe. The first crops were raised on hastily cleared fields that were littered with stumps and roots. The plow could not operate in such conditions; the hoe had to serve. Only in the 1840s was there a concerted turn to plows and machines worthy of what one Georgia planter hailed as “this utilitarian and labor-saving age.”⁵⁷ This was too late for Yankee observers for whom a continuing reliance on the hoe symbolized the slovenliness of southern agriculture. C. G. Parsons scoffed at the crudity of hoes “as heavy as the woodman’s axe!”⁵⁸ Frederick Law Olmsted, contrasting the efficient bustle of northern agriculture with the torpor of the slave South, enlarged on the point. Over-bulky tools were attributable to the reckless work habits that slavery encouraged: “I am assured that, in the careless and clumsy way they must be used by the slaves, anything lighter or less rude could not be furnished them with

of Development, Culture and Environmental Change since 1492 (Cambridge, 1987), 404. The extent of plowing and the timing of its introduction are disputed issues. Robin Blackburn contends that the nature of slave production, whereby planters had to have a workforce equal to the heightened demands of the harvest season, made them heedless of labor-saving devices: see Blackburn, *The Making of New World Slavery: From the Baroque to the Modern, 1492–1800* (London, 1998), 415–16. William A. Green, *British Slave Emancipation: The Sugar Colonies and the Great Experiment, 1830–1865* (Oxford, 1976), traces the spread of plowing after emancipation, largely as a reaction to that event, but J. Ward, “The Amelioration of British West Indian Slavery, 1750–1834: Technical Change and the Plough,” *Nieuwe West-Indische Gids* 63, no. 1/2 (1989): 41–58, demonstrates considerable investment in plowing before emancipation.

⁵⁷ *Southern Agriculturalist* 10 (1837): 239, quoted in Joseph P. Reidy, “Obligation and Right: Patterns of Labor, Subsistence, and Exchange in the Cotton Belt of Georgia, 1790–1860,” in *Cultivation and Culture: Labor and the Shaping of Slave Life in the Americas*, ed. Ira Berlin and Philip D. Morgan (Charlottesville, Va., 1993), 138–54 (quotation, 150). See also Steven F. Miller, “Plantation Labor Organization and Slave Life on the Cotton Frontier: The Alabama-Mississippi Black Belt, 1815–1840,” *ibid.*, 155–69.

⁵⁸ C. G. Parsons, *Inside View of Slavery; or, A Tour among the Planters* (Boston, 1855), 94.

good economy, and that such tools as we constantly give our laborers, and find profit in giving them, would not last out a day in Virginia."⁵⁹

BY THE MIDDLE of the nineteenth century, the hoe was in bad odor right across the English-speaking plantation economies it had once dominated. Yet the assumption—deeply rooted by the antebellum period—that the plantation hoe was a poorly fashioned thing does not sit well with the evidence from the eighteenth century. Planters in British North America and the West Indies expected quality products, and their British suppliers were very ready to fall in with their instructions. The result was a tool that was adaptable, available in a variety of forms, and fully capable of generating subvariants as necessity demanded. It was an ingredient of agricultural systems that were technically and organizationally fertile. The hoe also points up the full extent to which the plantation complex relied upon matériel from afar. All plantation societies, but those of the Caribbean especially, were dependent on imported tools (hoes, bills, and axes), processing equipment (coppers, stills, and rollers for crushing cane), construction materials (nails by the million, rivets, hinges, and locks), fabrics (osnabrigs, Welsh plains, Kendal cottons), apparel (Monmouth caps and Aberdeen stockings), foodstuffs (barreled beef from Ireland, Scottish herring, cod from the Grand Banks), and medicines.

The plantation hoe joined quite a range of plantation goods. These constituted a world of goods not usually spoken of by historians of consumption: the world of plain, often-despised articles consumed by the oppressed and exploited. Plain they may have been, but they emerged from an intricate production landscape crisscrossed by commodity chains of great length and variety. The articles consumed by slaves also changed over time. Even the hoe, which could hardly be plainer in its aspect, changed repeatedly. These features—the hoe's mutability, the multiplication of types—have implications for a wider historiography. Even though the study of Anglophone consumption has broadened over the last generation to take into account objects that lack the glitter of ormolu or the sheen of fine silk (some, indeed, that are quite workaday), our interest in goods still centers on issues of desire, aspiration, and display. These are seen as the drivers of change. By that measure, the hoe should be one of the most immobile of things. And yet it moved.

By moving, the hoe calls into question some fundamental assumptions that historians now make about the early modern British Atlantic. Cultural

⁵⁹ Frederick Law Olmsted, *A Journey in the Seaboard Slave States in the Years 1853–1854* (1856; repr., New York, 1904), 50–51. Ironically, this was an issue on which southern planters found common ground with their northern critics. Manufacturers in the North, southerners complained, produced substandard articles for Dixie markets, much inferior to the products intended for the free states. See Lewis C. Gray, *History of Agriculture in the Southern United States to 1860* (Gloucester, Mass., 1958), 2: 793; Eugene D. Genovese, *The Political Economy of Slavery: Studies in the Economy and Society of the Slave South* (New York, 1965), 55–57.

factors are routinely invoked to explain shifts in consumption and product design. Yet the case of the hoe suggests that some goods were in themselves protean; the intrusion of psychocultural variables—"desire" and the like—was not required. (And if psychocultural factors explain so little in the case of the hoe, how much are they really explaining with regard to other goods?) Other factors intervened. The design history of the hoe suggests that basic environmental adaptation was important, as might be expected of an agricultural tool. Improved communications within the Atlantic basin were of major significance, as was the closer integration between production and marketing that they made possible. The use that the Carron Company made of Scottish storekeepers in the Chesapeake during the 1760s points to this. The commodity chain that traveled across the Atlantic, linking metalware manufacturers in Europe to end users in the New World, became more finely articulated, allowing hoe makers to produce bespoke models in their efforts to dominate niche markets overseas.

So much is clear on the supply side; the nature of demand in the Western Hemisphere is hazier. Explaining consumption depends on identifying the consumer, but in the case of the hoe, the consumer had a particularly fugitive quality. Whom are we investigating: the slave or the master? It is the masters whose voices appear in the written record, and they who wrote the script, but the instructions issued by planters must have stemmed from observation of their enslaved workers and consultation with them.⁶⁰ In 1712 Ambrose Crowley relayed the opinions of a "very sensible Planter from Virginia" to his factory managers in the northeast of England. The planter had "taken pains in looking over" the Virginia hoes at Crowley's London depot and made detailed criticisms. One of his observations was that the eyes were not always exactly central to the blade, "so that when the helve is in, it does not stand streight to the Hoe which makes it very troublesome to those that use them."⁶¹ This was one of the rare occasions on which "those that use them" were invoked, when the possibility of agency on their part was acknowledged. Yet even here, slave consumers remain inscrutable, rendered so by their servitude and kept so by the accumulated contempt that surrounds the implement with which they labored.

⁶⁰ This touches on interpretive issues similar to those involved in the controversy over "Black Rice," for which see Judith A. Carney, *Black Rice: The African Origins of Rice Cultivation in the Americas* (Cambridge, Mass., 2001), and earlier work by Wood (*Black Majority*) and Littlefield (*Rice and Slaves*); the critique of David Eltis, Philip Morgan, and David Richardson in "Agency and Diaspora in Atlantic History: Reassessing the African Contribution to Rice Cultivation in the Americas," *American Historical Review* 112, no. 5 (December 2007): 1329–58; and the exchange among S. Max Edelson, Gwendolyn Midlo Hall, Walter Hawthorne, Eltis, Morgan, and Richardson in "The Question of 'Black Rice,'" *American Historical Review* 115, no. 1 (February 2010): 123–71.

⁶¹ "Mill Directions 28th April 1711—3rd Jan 1712," directive 10458, SL669.1, Newcastle City Library, Newcastle upon Tyne. I am grateful to David Cranstone for this reference.