
A Primer of A, B, Seeds: Advertising, Branding, and Intellectual Property in an Emerging Industry

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I. BIRTH OF THE SEED BUSINESS

Advertising and branding developed in the American seed industry between the era of the Revolution, when the roots of the industry were established, and the late nineteenth century. Changes in both practices expressed the developing modes of seed innovation, production, promotion, and consumption. The protection of innovation posed a special challenge. Like other technologies, plants and seeds are of course material objects, but unlike, say, widgets, they are technologies of a special type: they reproduce themselves in the hands of purchasers. Advertising and branding among seedsmen were, in fact, strongly shaped by the biological economy of sexual reproduction that was integral to their enterprise. And they lent themselves not only to selling seeds, but also to safeguarding the seedsmen's rights in their innovations as the industry grew with the rapid expansion of the American economy.

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In the early years of the industry, innovation meant largely the acquisition of plants new to North America, and it arose largely from the global exchange of plants and seeds that had begun with the age of exploration in the sixteenth century and that was practiced in the Americas by the Spanish and then English settlers. The global exchange ran both ways across the Atlantic: the exports providing samples of the North American continent's rich plant resources — more than two-hundred species of trees, bushes, vines, small fruits, and nuts, many of them unknown in Europe — and the imports adding to the continent's native abundance.¹

During the colonial period, the principal commercial exporter of plants and seeds was John Bartram, in Philadelphia, who, in 1728, inspired in part by an interest in medicinal plants, created what became an extensive botanical garden at Kingsessing, on the banks of the Schuylkill River four miles from the city. The garden comprised about six acres between the river and a stone house that he built himself, and about 200 to 300 acres of his adjoining farm.

A Quaker and a farmer's son, Bartram was skimpily schooled, a poor speller, penman, and grammarian, but for all that something of a botanical Benjamin Franklin — intellectually curious, extensively self-educated, fascinated by nature, a self-made savant and a practical man of the Enlightenment, a presence in the worlds of both commerce and learning. Bartram's Garden was a family business, the effort of several of his eleven children and of his second wife, the former Ann Mendenhall, who was the mother of nine of them, attended to the household, and ran the business when John was away.²

Bartram's principal foreign agent was Peter Collinson, a Londoner who did an extensive business with the American colonies, exporting plants, seeds, and bulbs, as well as woolen and silk cloth, and importing a variety of American flora, distributing them to gardeners and botanists in both England and Europe.³ As the foreign demand for his plants increased, Bartram, often joined by his son William, a talented naturalist and artist, traveled the mountains and valleys of the colonies, searching for "wonderful productions in nature" to send to his correspondents, as he told the artist and naturalist Mark Catesby.⁴

¹ See Daniel J. Kevles, *Eden and Empire: The Mercantile Making of American Colonial Husbandry*, 99 *YALE REV.* 104, 104-07 (2011) [hereinafter *Eden and Empire*].

² See *id.* at 110-11; Merrill D. Smith, *The Bartram Women: Farm Wives, Artists, Botanists, and Entrepreneurs*, *BARTRAM BROADSIDE*, Winter 2001, at 1-4 (copy on file with Archives, Bartram's Garden, Kingsessing, Pa. [hereinafter ABG]).

³ See Kevles, *Eden and Empire*, *supra* note 1, at 111-12.

⁴ See *id.* at 112-13.

In all, Bartram sent at least ninety-five species of plants to Collinson, including North American oaks, maples, and pine, as well as most of the evergreens of the middle colonies and various flowering shrubs. By the 1760s, his plants were being grown in gardens throughout England.⁵

However, most Americans, practical growers and consumers of food, were not primarily concerned with plant exports but with imports. Despite the natural abundance the settlers encountered, they found the new Eden inadequate to their appetites. The continent lacked some of the staple fiber plants and many of the vegetables, grains, and most of the tree fruits common in Europe. From the outset, on their own initiative and with encouragement by the colonial proprietors, companies, and then governments, the settlers supplemented the native fibers, fruits, and edible plants with stalwarts from the Old World and promising specimens from the southern regions of the new one.⁶

From the colonial period onward, the importation process was facilitated by multiple agents — gentlemen farmers eager to improve their crops and impress fellow members of their local agricultural societies; botanists who participated in the international seed and plant trade; and, beginning in the early nineteenth century, by the U.S. government. After 1819, the government encouraged naval officers and consular officials to bring back plants and seeds from their far-flung travels. So did the U.S. Patent Office after an act of Congress in 1836 granted it a building and, in 1839, an adequate budget and expanded duties, including management of a new agricultural section (the nucleus of the later Department of Agriculture).⁷

Importation also formed much of the stock in trade of the commercial seed houses and nurseries. First established in the late eighteenth century, they began by serving a local clientele, then, in a few cases, grew to serve regional markets and beyond.⁸ They were the

⁵ *Id.* at 113-14; see Joel T. Fry, *Inside the Box: John Bartram and the Science and Commerce of the Transatlantic Plant Trade*, in *WAYS OF MAKING AND KNOWING: THE MATERIAL CULTURE OF EMPIRICAL KNOWLEDGE* (Pamela H. Smith, Amy Myers & Harold Cook eds., forthcoming Dec. 2013) (manuscript at 9-12) (on file with author) [hereinafter *Inside the Box*].

⁶ Kevles, *Eden and Empire*, *supra* note 1, at 106.

⁷ See JACK R. KLOPPENBURG, *FIRST THE SEED: THE POLITICAL ECONOMY OF PLANT BIOTECHNOLOGY, 1492–2000*, at 53-55 (1988); PHILIP J. PAULY, *FRUITS AND PLAINS: THE HORTICULTURAL TRANSFORMATION OF AMERICA* 104-05 (2008).

⁸ No doubt typical of the local purveyors were Hannah and Jacob Dubre, who sold seed and fruit trees from their thirty-five acre farm near Philadelphia between the 1750s and the 1770s. See *The Period: 1784–1800*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Feb. 2009 [hereinafter *1784–1800*],

principal sources of new varieties, acting as clearing houses in a generally free-flowing foreign and domestic exchange of plants and seeds. They obtained both, not only directly from abroad, but from government expeditions or federal officials who brought an enthusiasm for plants to their foreign posts, and from local farmers and gardeners. For example, Bartram's Garden gratefully acknowledged its "friends for many valuable presents of rare plants, which have served to increase the variety and usefulness of our collection."⁹

In New York, the Prince Nursery, founded in 1737 at Flushing Landing, Long Island, and run at the time of the Revolution by William Prince, offered a sizable variety of fruit trees, including new stocks from abroad, and sold to farmers and orchardists in a number of colonies.¹⁰ Philadelphia was the home of several prominent seed

available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%202%20-%20Part%2011%20The%20Period:%201784-1800/Garlic.html>. These commemorative newsletters are based largely on the company's holdings of sixty Landreth's seed catalogues dating from 1839 to 1945, including a complete set for 1852 to 1893. See *What It Means to Have Been a Part of America for 225 Years*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Jan. 2009 [hereinafter *Part of America*], available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%201%20-%20The%20Commemorative%20Newsletter%20Series/Garlic.html>.

⁹ A CATALOGUE OF TREES, SHRUBS, AND HERBACEOUS PLANTS, INDIGENOUS TO THE UNITED STATES OF AMERICA; CULTIVATED AND DISPOSED OF BY JOHN BARTRAM & SON, AT THEIR BOTANICAL GARDEN, KINGSESSING, NEAR PHILADELPHIA, TO WHICH IS ADDED A CATALOGUE OF FOREIGN PLANTS, COLLECTED FROM VARIOUS PARTS OF THE GLOBE (Phila., Bartram & Reynolds 1807) [hereinafter *TREES, SHRUBS, AND HERBACEOUS PLANTS*] (on file with ABG). Bartram's Garden was still receiving gifts of plants and seeds in 1830. See PERIODICAL CATALOGUE OF FRUIT AND ORNAMENTAL TREES AND SHRUBS, GREEN HOUSE PLANTS, ETC. CULTIVATED AND FOR SALE AT BARTRAM'S BOTANIC GARDEN, KINGSESSING, NEAR GRAY'S FERRY — FOUR MILES FROM PHILADELPHIA 1-2 (Phila., Russell & Martien 1828 & 1830 Addition) [hereinafter 1828 CATALOGUE] (on file with ABG). Landreth's, another Philadelphia firm, obtained a Dutch cabbage from the German and Swedish Market-Gardeners operating near the city before the Revolution, and in 1824 it thanked "those of our friends who have so politely presented us with rare plants, seeds, etc." DAVID LANDRETH & CUTHBERT LANDRETH, CATALOGUE OF GREENHOUSE PLANTS, HARDY TREES, EVERGREEN SHRUBS, FLOWERING SHRUBS, BULBOUS ROOTED, AND HERBACEOUS PLANTS, at iii (1824) [hereinafter 1824 CATALOGUE] (on file with Special Collections, Manuscripts and Archives Department, University of Delaware Library, Newark, Delaware [hereinafter UDEL]); see DAVID LANDRETH & SONS, DESCRIPTIVE LIST OF LANDRETH'S PEDIGREE TURNIP SEEDS AND OTHER SEASONABLE SEEDS 12 (1883) [hereinafter *PEDIGREE TURNIP SEEDS*] (on file with UDEL); see also CATALOGUE OF THE PRINCIPAL GARDEN SEEDS CULTIVATED AT THE HORTICULTURAL GARDENS OF DAVID LANDRETH & CO. 14 (Phila., William Stavely 1836) [hereinafter 1836 CATALOGUE] (on file with UDEL).

¹⁰ See Daniel J. Kevles, *Fruit Nationalism: Horticulture in the United States — from the Revolution to the First Centennial*, in *AURORA TOREALIS: STUDIES IN THE HISTORY OF*

firms besides Bartram's Gardens — notably the houses of David and Cuthbert Landreth and Bernard McMahon. Their proprietors straddled the worlds of commercial, academic, and avocational botany. Together, the botanical proprietors, professors, and amateurs made the city a major center of plant and seed learning and enterprise.¹¹

John Bartram had pursued a modest domestic trade, selling to farmers with a proclivity for innovative plantings such as George Washington. In 1771, his eyesight failing, he turned over the business to his son John Bartram, Jr., who managed it with his brother William. While continuing vigorously in the international seed trade, they expanded their domestic operation, searching for new plants in the American wild and turning part of the family farm into a commercial nursery. The work of the garden was assisted by John Jr.'s children, especially his daughter Ann. Taught to draw by her uncle William, she was an accomplished plant illustrator and even in her early twenties impressed visitors with her devotion to the garden and exceptional knowledge of botany.¹²

The business flourished in the early nineteenth century, with Ann playing an increasing role in it, but its international trade suffered severely from the embargo and subsequent trade restrictions during the period of friction with Britain that culminated in the War of 1812. In 1809, Ann married Robert Carr, a widower and printer who, in 1815, his print shop having failed, joined Ann, her uncle William, and John Bartram Carr, the surviving child from his first marriage, in reviving the business. Along with shipping seeds and plants of hundreds of species and varieties around the world, the firm — now advertised as “Bartram's Botanic Garden, Robert Carr, Proprietor” — further expanded its domestic inventory to include a large selection of fruit trees and foreign plants. In 1829, it also began offering the gorgeous red-flowered plant that would become the namesake of Joel Poinsett. Poinsett had obtained the plant in Mexico, where he was the first U.S. minister to the new republic, and had sent it to Bartram's Garden for cultivation.¹³

SCIENCE AND IDEAS IN HONOR OF TORE FRÅNGSMYR 129, 131 (Marco Beretta, Karl Grandin & Svante Lindqvist eds., 2008) [hereinafter *Fruit Nationalism*].

¹¹ PA. HORTICULTURAL SOC'Y, FROM SEED TO FLOWER 22 (1976); TREES, SHRUBS, AND HERBACEOUS PLANTS, *supra* note 9, at 2, 7; *see also* 1828 CATALOGUE, *supra* note 9, at 3 (the Preface was reprinted from the first catalogue, which appeared in 1801).

¹² *See* PERIODICAL CATALOGUE OF AMERICAN TREES, SHRUBS, PLANTS, AND SEEDS, CULTIVATED AND FOR SALE AT THE BARTRAM BOTANIC GARDEN, NEAR PHILADELPHIA 83-84 (Phila., Russell & Martien 1831) (on file with ABG); 1828 CATALOGUE, *supra* note 9, at 3-4, Index; Smith, *supra* note 2, at 5-7.

¹³ *See* Fry, *Inside the Box*, *supra* note 5, at 12-13; Joel T. Fry, *John Bartram Carr, the*

David Landreth opened his seed business in Philadelphia in 1784, announcing in a newspaper advertisement that he offered “[a] fresh IMPORTATION of Choice Garden Seeds.”¹⁴ A thirty-two-year-old recent immigrant from London, where he had acquired some training in the seed trade, he had been drawn to the city by its wealth and botanical vitality. In 1789, his brother, Cuthbert, a refugee from British impressment, joined the house. The firm prospered as a local business, gaining a large contract from the city to line its central streets with trees, but it soon began attracting customers beyond the city, including George Washington, Thomas Jefferson, and Napoleon’s brother Joseph.¹⁵

In the early nineteenth century, Landreth’s continued to tout its offerings of imports — telling customers in 1824, for example, that it had gone to “considerable expense” to procure useful and ornamental trees and plants not only from the United States, but from Europe, China, the Cape of Good Hope, New South Wales, India, Mexico, and South America.¹⁶ By the 1820s, the firm, which had opened a branch in Charleston, South Carolina, was known from Boston to New Orleans and was shipping sizable quantities of seeds to British India. It was perhaps the largest seed house in the nascent industry, with a farm for the production and testing of seed on the city’s outskirts, and a five-story, three-storefront-wide warehouse at its center.¹⁷

Unknown Bartram, BARTRAM BROADSIDE (John Bartram Ass’n, Phila., Pa.), Fall 1994, at 1-2, 4 [hereinafter *Unknown Bartram*] (on file with ABG); Joel T. Fry, *The Introduction of the Poinsettia at Bartram’s Garden*, BARTRAM BROADSIDE (John Bartram Ass’n, Phila., Pa.), Winter 1994–1995, at 3-7 (on file with ABG); Smith, *supra* note 2, at 5-7; see also 1828 CATALOGUE, *supra* note 9, at Cover.

¹⁴ 1784–1800, *supra* note 8; see also *Our History*, D. LANDRETH SEED COMPANY, <http://www.landrethseeds.com/history.html> (last visited Aug. 2012).

¹⁵ 1784–1800, *supra* note 8; *The Period: 1800–1820*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Mar. 2009, available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%203%20-%20Part%20III%20The%20Period:%201800-1820/Garlic.html>.

¹⁶ LANDRETH & LANDRETH, 1824 CATALOGUE, *supra* note 9, at iii. Extolling imports was a regular practice of the firm. In a circular in 1836, it stressed that it obtained seeds from “extensive collections in Europe,” and “direct from the East and West Indies and South America.” 1836 CATALOGUE, *supra* note 9, at 14.

¹⁷ See D. LANDRETH & SON, KITCHEN-GARDEN PRICED LIST OF LANDRETHS’ AMERICAN PEDIGREE SEEDS 31 (1886) [hereinafter KITCHEN-GARDEN] (on file with UDEL). In Charleston, the Landreth’s originally used slave labor hired at between \$100 and \$160 per man per season, but they ceased doing so in 1833. *The Period: 1830–1850*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), May 2009 [hereinafter 1830–1850], available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%205%20-%20Part%20V%20The%20Period:%201830-1850/Garlic.html>.

Bernard McMahon arrived in Philadelphia from Ireland in 1796. A Protestant Ulsterman, he had incurred the hostility of the authorities by joining with Catholics and dissenters in active opposition to British rule. He found welcome and work among the city's Irish political radicals, but he was a gardener by inclination and long experience. Broadly knowledgeable in botanic and agricultural science, he established connections among the city's seedsmen and botanists — he may have worked briefly at Landreth's — and in 1802 he opened his own seed business.¹⁸ He soon added a bookstore stocked with some eighty English, French, and American volumes — “every valuable work, ancient or modern,” he said — on agriculture, botany, and gardening.¹⁹ His shop became a magnet for botanists and practical gardeners who liked to talk amid its seed boxes and book-lined shelves while McMahon and his wife bustled about.²⁰ Like his counterparts, McMahon prospered by selling imported plants and seeds, but he was something of an Anglophobe, a staunch devotee of the new democracy, and, as such, a plant nationalist, eager to strengthen the United States' botanic resources. He found American gardening and agriculture handicapped by its reliance on foreign treatises; they were unsuitable and misleading guides for plantings in the country's diverse climates and soils.²¹

¹⁸ See BERNARD MCMAHON, *THE AMERICAN GARDENER'S CALENDAR*, at v (1806) [hereinafter *GARDENER'S CALENDAR*] (on file with ABG); PA. HORTICULTURAL SOC'Y, *supra* note 11, at 22; Robert S. Cox, *I Never Yet Parted, Bernard McMahon and the Seeds of the Corps of Discovery*, in *THE SHORTEST AND MOST CONVENIENT ROUTE*, LEWIS AND CLARK IN CONTEXT 102, 109-14 (Robert S. Cox ed., 2004); Peter Hatch, *Bernard McMahon, Pioneer American Gardener*, TWINLEAF (Jan. 1993), <http://www.monticello.org/site/house-and-gardens/bernard-mcmahon-pioneer-american-gardener>.

¹⁹ A CATALOGUE OF GARDEN, HERB, FLOWER, TREE, SHRUB, AND GRASS SEEDS; GARDENING, AGRICULTURAL AND BOTANICAL BOOKS, GARDEN TOOLS, ETC. SOLD BY BERNARD MCMAHON 4 (Phila., William Duane 1807) [hereinafter 1807 GARDEN, HERB, FLOWER] (on file with ABG).

²⁰ See A CATALOGUE OF GARDEN, HERB, FLOWER, TREE, SHRUB, AND GRASS SEEDS; GARDENING AGRICULTURAL, AND BOTANICAL BOOKS, GARDEN TOOLS, ETC. SOLD BY BERNARD MCMAHON 3-4 (Phila., William Duane 1810) [hereinafter 1810 GARDEN, HERB, FLOWER] (on file with ABG); Hatch, *supra* note 18; see also PA. HORTICULTURAL SOC'Y, *supra* note 11, at 22.

²¹ In 1804, McMahon informed prospective customers that he offered:

[F]or sale, an extensive variety of Asiatic, South-Sea Islands, African and European Seeds, of the most curious and rare kinds; and is daily adding to his collection, as he avails himself of every opportunity to procure seeds from all parts of America, as well as from every part of the world, to which the enterprize [sic] of American commerce extends

In 1806, aiming to overcome the deficiency in progress to be expected “from an intelligent, happy, and independent people,” McMahon published the *American Gardener’s Calendar*, the first comprehensive handbook for growers in the United States and, in part, a celebration of native varieties. In contrast to European practice, he wrote, “we cultivate many foreign trifles, and neglect the profusion of beauties so bountifully bestowed upon us by the hand of nature.”²² McMahon’s *Calendar*, at once practical and nationalist, struck a resonant chord, enough to sustain its publication through eleven editions, the last of which appeared in 1857.²³

Among admirers of the *Calendar* was Thomas Jefferson, who had been personally given a copy by William Duane, the editor in Philadelphia of the pro-Jefferson newspaper *Aurora*, where McMahon advertised his seeds, and one of the Irish radicals whom McMahon had gotten to know. Through Duane, Jefferson and McMahon struck up a friendship of correspondence and seed exchanges. In 1806, Jefferson arranged for McMahon to be given a large portion of the seeds and plant specimens obtained by Meriwether Lewis and William Clark during their expedition, begun in 1804 and just completed, through the newly acquired Louisiana Territory. But here concern for scientific credit intruded against the open distribution of new varieties: McMahon was to cultivate and maintain the plant materials in secret until such time as Lewis could publish a report on the expedition’s botanical findings. McMahon dutifully stuck to the agreement, growing the plants, which comprised some twenty-five species, under restriction on the twenty acres that he purchased in 1808 to expand his nursery and botanic garden.²⁴

But Lewis committed suicide in 1809, his report unpublished, and McMahon, who had kept to his pledge, soon evidently felt released from it. In March 1812, he advertised several new species of currant in Duane’s *Aurora*, noting:

The seeds of those shrubs were collected by Messrs. Lewis and Clarke . . . on their expedition to the Pacific Ocean, and sent

1 (Phila., Bartholomew Graves 1804) [hereinafter 1804 CATALOGUE] (on file with ABG); see also 1807 GARDEN, HERB, FLOWER, *supra* note 19, at 3.

²² MCMAHON, GARDENER’S CALENDAR, *supra* note 18, at vii, 72.

²³ Cox, *supra* note 18, at 115; Hatch, *supra* note 18.

²⁴ Cox, *supra* note 18, at 115-17, 119-21, 123-24; Hatch, *supra* note 18. In 1804, Lewis sent Jefferson several cuttings of the Osage orange tree, which he had obtained from the Osage tribe in Missouri. Jefferson sent the slips to William Hamilton, a friend who owned a large estate in Philadelphia and who gave some of them to Landreth’s. Cox, *supra* note 18, at 107-09.

to the advertiser by Thomas Jefferson, Esq. then President of the United States, to whose love of country and science, the advertiser is indebted for several hundred important species of plants, now in his possession, and in a successful state of cultivation.²⁵

McMahon died in 1816, but his wife and his son carried on the business and the publication of new editions of the *Calendar* for a quarter century. The firm's market evidently reached from Boston to Charleston and across the Atlantic.²⁶

II. ADVERTISING AND EXPANSION

When McMahon published the notice of his striking botanical possessions, the advertising of seeds was, like the seed industry itself, in its infancy. The senior John Bartram had relied on Collinson to promote his exports. Demand for them among the gentry whom Collinson served was stimulated by the color illustrations in Mark Catesby's *Natural History*, which was published between 1729 and 1747 and by Collinson's printing lists of the seeds Bartram sent and placing notices of them in the *Gentleman's Magazine*. Domestic advertisement before the Revolution was limited to newspapers. For political reasons, the British Crown discouraged private presses, and the proprietors of those in operation, including Benjamin Franklin, who was actively interested in plants, did not publish agricultural materials. In 1771, William Prince published a one-page list of the fruit trees available at his nursery, but he was the exception that proved the rule.²⁷

After the Revolution, the discouragement of printing was gone and the westward expansion of settlements and agriculture enlarged the demand for seed. In 1783, William Bartram published the nation's first seed catalogue, a one-page broadside of the stock in trade at Bartram's Garden.²⁸ Bartram's, and likely other seed houses, continued to

²⁵ Bernard McMahon, *Fragrant Currant*, AURORA & GEN. ADVERTISER, Mar. 11, 1812 (on file with ABG).

²⁶ Cox, *supra* note 18, at 114, 127-28; Hatch, *supra* note 18.

²⁷ Fry, *Inside the Box*, *supra* note 5, at 6, 9, 12-13; see also PA. HORTICULTURAL SOC'Y, *supra* note 11, at 14; IRWIN RICHMAN, SEED ART: THE PACKAGE MADE ME BUY IT 8-9 (2008); TO BE SOLD, BY WILLIAM PRINCE, AT FLUSHING-LANDING, ON LONG-ISLAND, NEAR NEW YORK, A LARGE COLLECTION OF FRUIT TREES, AS FOLLOWS 1 (N.Y.C., H. Gaine 1771) (on file with ABG).

²⁸ CATALOGUE OF AMERICAN TREES, SHRUBS, AND HERBACEOUS PLANTS, MOST OF WHICH ARE NOW GROWING, AND PRODUCE RIPE SEED IN JOHN BARTRAM'S GARDEN, NEAR PHILADELPHIA 1 (1783) (on file with ABG). Other broadsheets include A CATALOGUE OF

advertise in newspapers into the 1830s, but early in the nineteenth century they began to issue bound catalogues of their offerings.²⁹

The broadsheets and catalogues provided both the common English and Latin names for the advertised goods, and some, including Bartram's Garden, identified them by their Linnaean nomenclature.³⁰ The practice of joint English and Latin naming bespoke the degree to which the seed business straddled the worlds of commerce and botanic learning, yet it also expressed an eagerness to specify the plants with certainty for customers amid the increasing Babel of common names. At the head of the list of seeds in his catalogue for 1810, McMahon, a devotee of the Linnaean system of classification — he called his twenty-acre garden “Upsal,” after Uppsala, Linnaeus' city in Sweden — said that he provided the scientific names as well as the common ones for people who wished to become acquainted with them, but also “to prevent misconceptions of the articles required by purchasers.”³¹

KITCHEN-GARDEN, FIELD, AND FLOWER-SEEDS, PLANTS, ETC. FOR SALE BY S. GRUNDY 1 (n.d.) (on file with ABG), and A CATALOGUE OF FRUIT TREES FOR SALE, IN THE FALL OF 1806, BY DANIEL SMITH AND COMPANY, AT BURLINGTON, STATE OF NEW JERSEY, NEAR PHILADELPHIA 1 (1806) (on file with ABG).

²⁹ See, e.g., *American Seeds and Plants, for Sale at Bartram's Botanic Garden*, PAULSON'S AM. DAILY ADVERTISER, Oct. 19, 1819 (on file with ABG) (advertising Bartram's Garden); *American Seeds and Plants, for Sale at Bartram's Botanic Garden*, PAULSON'S AM. DAILY ADVERTISER, Oct. 26, 1818 (on file with ABG) (same); *Bartram Botanic Garden, Near Philadelphia*, PAULSON'S AM. DAILY ADVERTISER, Mar. 19, 1832 (on file with ABG) (same); John Bartram, *Bartram's Garden Kingsessing*, THE AURORA, June 27, 1811 (on file with ABG) (same); John Bartram, *Seeds and Plants*, THE AURORA, Nov. 24, 1810 (on file with ABG) (same); see also *Bartram's Botanic Garden, Near Gray's Ferry*, PAULSON'S AM. DAILY ADVERTISER, June 18, 1820 (on file with ABG) (same); *Bartram's Botanic Garden, Near Philadelphia*, PAULSON'S AM. DAILY ADVERTISER, Mar. 13, 1827 (on file with ABG) (same); *For Sale as Usual, At Bartram's Botanic Garden, Near Gray's Ferry Kingsessing*, PAULSON'S AM. DAILY ADVERTISER, Mar. 13, 1813 (on file with ABG) (same); *Fresh American Seeds, for Sale, at Bartram's Botanic Garden*, PAULSON'S AM. DAILY ADVERTISER, Dec. 2, 1817 (on file with ABG) (same); *Kingsessing Gardens, Near Gray's Ferry, Four Miles from the City*, THE AURORA, Apr. 17, 1810 (on file with ABG) (same). Bartram's Garden issued its first bound catalogue in 1801, responding to “repeated” requests from friends at home and abroad. TREES, SHRUBS, AND HERBACEOUS PLANTS, *supra* note 9, at 2. Examples of bound catalogues include *id.*; 1807 GARDEN, HERB, FLOWER, *supra* note 19; and 1804 CATALOGUE, *supra* note 21.

³⁰ TREES, SHRUBS, AND HERBACEOUS PLANTS, *supra* note 9, at 2; LANDRETH & LANDRETH, 1824 CATALOGUE, *supra* note 9, at iii. William Prince's two sons had divided and continued the family nursery business. One of them, also named William, called his portion the Linnaean Botanic Garden and in his catalogue for 1820 identified the plants and trees he offered for sale solely by their Latin names. Kevles, *Fruit Nationalism*, *supra* note 10, at 133.

³¹ 1810 GARDEN, HERB, FLOWER, *supra* note 20, at 2. In his first broadsheet, McMahon noted that he included along with the common names of the plants the

For the most part, all these publications comprised bare lists of plants and seeds for sale. The proprietors of the seed houses made no effort to differentiate their products except to tout the fact that a significant part of their stock was imported from many regions of the world.³² Through much of the first half of the nineteenth century the seed business was simply not very competitive because the number of firms was small.

Demand was likely limited by the biology of plant reproduction. Once bought, fruit trees and vines could be asexually reproduced from scions and cuttings, which reduced dependence on nurseries. Sexually reproducing plants of course generate seeds, and the seeds could be saved by the purchaser for the next year's planting, a combination of biological fact and human practice that minimized the need to purchase seed. Farmers and gardeners could also obtain seed for standard and new varieties of field grains and vegetables by acquiring a neighbor's excess.³³ They were also likely disinclined to buy seeds because it was difficult to know with much, if any, confidence their identity (i.e., what plant or plants they would produce) or their quality (i.e., whether they would germinate and produce a worthy crop free of weeds).

Still, there were incentives for farmers and gardeners to turn to commercial seed firms and nurseries beyond their prowess at importation. While asexual reproduction yielded genetically identical fruit trees and vines, the biology of sexual reproduction that enabled the saving of seed for the next year's crop likely also encouraged farmers, and especially gardeners, to turn to the seed houses. The farmer's or gardener's seeds, themselves the products of random sexual reproduction in the field or garden, would yield a next generation that varied widely in quality. Unless the grower selected and planted every year only the seed from the best plants in his crop, his production

"Generic and Specific Names and Distinctions, according to the Sexual System of the celebrated LINNAEUS" for the use of "such Ladies, Gentlemen, and Gardeners, as wish to become scientifically acquainted with the Plants they cultivate." A CATALOGUE OF GARDEN, HERB, FLOWER, TREE, SHRUB, AND GRASS SEEDS; GARDENING, AGRICULTURAL AND BOTANICAL BOOKS, GARDEN TOOLS, ETC. ETC., SOLD BY BERNARD MCMAHON, SEEDSMAN, NO. 129 CHESNUT-STREET, PHILADELPHIA 1 (1803) (on file with ABG); see also Hatch, *supra* note 18.

³² See, e.g., A CATALOGUE OF GARDEN, GRASS & FLOWER SEEDS, ROOTS, PLANTS, ETC. CONSTANTLY FOR SALE WHOLESALE AND RETAIL BY GOLDTHWAIT & MOORE, CORNER OF SECOND AND WALNUT STREET (Phila., Thomas Beadford 1796) (on file with UDEL) (containing lists of seeds for sale); 1828 CATALOGUE, *supra* note 9 (same); catalogues and broadsheets cited *supra* notes 29-31 (same).

³³ KLOPPENBURG, *supra* note 7, at 51-52.

would tend to decline over time in quantity and quality.³⁴ But if he engaged in such selection, he would be removing his best produce from what he could sell or consume. Thus, to maintain the vitality of their crops, farmers and gardeners faced a recurrent need for fresh seed that they might obtain from neighbors or seed houses or both.

The market for fresh seed grew significantly from the 1830s onward as the transportation revolution — the building of canals and railroads — established regional and then national markets. While many farmers continued to save seed from one year's crop for planting in the next, the incentives to purchase seed were likely multiplied by the efficiencies such purchases offered for the large-scale farms that increasingly marked American agriculture in the post-Civil War decades. An increasing market developed for grain and staple crop seed, as well as for vegetables. Judged by the content of seed catalogues, demand for vegetable and flower seed appears to have risen especially sharply among urban and rural kitchen gardeners and among market-gardeners — growers who supplied the country's rapidly expanding cities and their emerging suburbs.³⁵

The mounting demand helped change the seed industry. While several of the original firms went out of business, including Bartram's Garden and McMahon's, both of which closed by 1850, several of their contemporaries continued to flourish, notably Landreth's and a seed house founded in New York in 1804 by Grant Thorburn, a former Landreth's apprentice whom some writers credit for introducing the potted plant to the gardening business.³⁶ In the 1820s and 1830s, they were joined by a new generation of seedsmen. Prominent among them were Joseph Breck, who established his business in Boston in 1822, and Robert Buist, another of Landreth's apprentices, who established his shop in Philadelphia in the 1830s. Breck and Buist were among the

³⁴ The tendency to reversion was common knowledge among seedsmen. See, e.g., LANDRETHS' SEEDS, LANDRETHS' RURAL REGISTER AND ALMANAC 49 (1887) [hereinafter 1887 RURAL REGISTER] (on file with UDEL) (discussing the reversion tendencies of peas).

³⁵ Market gardening grew enormously during the latter half of the nineteenth century as urban residents devoted less of their gardens to growing vegetables and more of them to cultivating flowers. See *The Period: 1890–1900*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Feb. 2011 [hereinafter 1890–1900], available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%2010%20-%20Part%20X%20The%20Period:%201890-1900/Garlic.html>.

³⁶ G. THORBURN & SON, ADVERTISEMENT (1829) (on file with UDEL); *The Period: 1870–1880*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Dec. 2010 [hereinafter 1870–1880], available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%208%20-%20Part%20VIII%20The%20Period:%201870-1880/Garlic.html>.

first American seedsmen to devote a sizable part of their businesses to ornamental flowers, a sign of the growing interest, especially among women, for decorative plants in both garden and home. After the Civil War, several more important firms came into the business, including the Peter Henderson Company in New York City, which specialized in market gardening, and W. Atlee Burpee & Company, which Burpee started in Philadelphia in 1878, when he was twenty. Together, these firms and others formed a recognizable seed industry, and they joined together in 1883 to form the American Seed Trade Association.³⁷

The expansion of the industry was accompanied by increasing competition, and, evidently in response, the seed houses revised their advertising and market strategies. Landreth's led the way, enlarging the appeal of its offerings by replacing its longstanding plant-list catalogue, beginning in 1847, with an annual *Rural Register and Almanac*. The publication comprised not only a seed catalogue, but also extensive advice about gardening and farming, basic facts about the U.S. government, including the names of the presidents and his cabinet, schedules of astronomical events, reports of recent scientific discoveries, particularly those related to farming, and new gardening tools. Demand for the new catalogue was strong, stimulating an increase in the first year's print run of about 13,000 to some 600,000 by the late 1850s. Perhaps mindful of the publication's popularity, other companies expanded their catalogues in a similar fashion. Landreth's kept the *Rural Register and Almanac* up to date with an eye not only to the information it contained, but to the customers it was trying to reach, publishing it in the mid-1880s in English, German, French, Spanish, and Swedish.³⁸

Competition placed a premium on offering multiple plant varieties every year and, each year, a number of new varieties — what the trade called “novelties.” Through much of the century the seed houses

³⁷ See KLOPPENBURG, *supra* note 7, at 62; Fry, *Unknown Bartram*, *supra* note 13, at 7; *The Period: 1850–1860*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), June 2009 [hereinafter 1850–1860], available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%206%20-%20Part%20VI%20The%20Period:%201850-1860/Garlic.html>; 1870–1880, *supra* note 36; *Part of America*, *supra* note 8. Morning glories, used to hide outbuildings such as privies, were especially popular. *The Period: 1880–1890*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Jan. 2011 [hereinafter 1880–1890], available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%209%20-%20Part%20IX%20The%20Period:%201880-1890/Garlic.html>. The cover of one of Landreth's catalogues featured “Gardening Implements Suited to the Use of Ladies.” D. LANDRETH, GARDENING IMPLEMENTS SUITED TO THE USE OF LADIES (on file with UDEL).

³⁸ LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 4; 1830–1850, *supra* note 17; 1850–1860, *supra* note 37.

continued to obtain novelties by importation, but an increasing fraction of them came from domestic sources — seed growers and farmers. Only some of the novelties were the products of deliberate hybridization. Such efforts were likely too costly to be widely pursued, requiring commitments of land and time, and the outcome was too uncertain to warrant the investment. For example, in the latter half of the nineteenth century, a doctor in Baltimore, Maryland, who was an amateur horticulturalist, spent twenty-four years developing and fixing the stability of the hybrid Trophy tomato, the progenitor in turn of a number of tomato varieties now widely grown in the United States.³⁹

Most plant innovation tended to arise from the plots of cultivators who found new varieties in their fields or gardens, the products of chance crossings or natural mutations, and then selected them for propagation.⁴⁰ To be sure, innovators via selection could be victimized by biology no less than those who practiced hybridization: Whichever method was used to obtain them, sexually reproducing plants generated seeds and the seeds could be saved by the purchaser for the next year's planting. But the disincentives to innovation were no doubt far greater for hybridization, with its heavy costs, than for selection. Varietal improvement by selection was a byproduct of the grower's primary purpose, the production of crops or seeds, while hybridization was not.

The emphasis on new varieties was illustrated by Landreth's offerings. In 1799, it listed seventy-one varieties of vegetables; in 1852, ninety-three; and in 1884, 251, making for an increase in the first fifty-three years of about twenty-four percent, but in just the next thirty-two years of almost 170%. In 1847, Landreth's advertised some 165 varieties of flower seeds; in 1886, more than 250.⁴¹ The firm developed

³⁹ *The Period: 1820–1830*, D. LANDRETH SEED COMPANY NEWSL. (D. Landreth Seed Co., New Freedom, Pa.), Apr. 2009, available at <http://www.landrethseeds.com/newsletters/Volume%205/Issue%204%20-%20Part%20IV%20The%20Period:%201820-1830/Garlic.html>.

⁴⁰ This is evident from the reports in multiple catalogues of the origins of new varieties. Most new and original varieties of fruit trees and vines also originated from chance variations. Daniel J. Kevles, *New Blood, New Fruits: Protections for Breeders and Originators, 1789–1930*, in *MAKING AND UNMAKING INTELLECTUAL PROPERTY: CREATIVE PRODUCTION IN LEGAL AND CULTURAL PERSPECTIVE* 253, 259–60 (Mario Biagioli, Peter Jaszi & Martha Woodmansee eds., 2011).

⁴¹ See LANDRETH'S RURAL REGISTER AND ALMANAC 14 (1886) [hereinafter 1886 RURAL REGISTER] (on file with UDEL); LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 14–16; 1870–1880, *supra* note 36; see also A CATALOGUE OF THE PRINCIPLE GARDEN SEEDS CULTIVATED BY DAVID LANDRETH, PHILADELPHIA 15–18 (Phila., Staveland & McCalla 1847) [hereinafter 1847 CATALOGUE].

several money-making novelties from its own fields, notably varieties of peas, cabbages, and pearl onions that, by maturing early, advantaged the farmer in the produce market.⁴² Other firms regularly featured novelties of their own, some of which would become mainstays of the American diet — for example, Iceberg Lettuce from Burpee's, and Henderson's Bush Lima Bean.⁴³

Seedsmen branded the novelties they had originated or acquired, naming them after themselves, their firms, or their places of cultivation: thus, "Landreth's Extra Early Peas" or "Landreth's Bloomsdale Spinach." The brand names joined a proliferation of common names of geographical or arbitrary derivation such as the "Bermuda Island White Onion," or the "Trophy Tomato."⁴⁴ The enthusiasm for using the Linnaean system as a means of specifying plants in commercial catalogues had declined significantly after McMahon's generation, and now the rising use of common names and brand names drove out many of the Latin plant designations, too. However, unlike their Latin or Linnaean predecessors, the brand names were specific to the variety, not universal identifiers. How, then, were gardeners and farmers to know exactly what they were purchasing?

The seed houses found the answer in illustrations. Beginning in the 1850s, their catalogues included black-and-white engravings of their offerings and some colored lithographs of them. The technique of chromolithography, initially developed in Europe, had been introduced into the United States in the early 1840s. It was expensive at first, but the cost declined with improvement of the technique, and seed houses increasingly used them in their catalogues to depict flowers and some vegetables. It was an effective way of arousing consumer demand and for identifying what the branded plant would yield.⁴⁵

⁴² See LANDRETH & SONS, PEDIGREE TURNIP SEEDS, *supra* note 9, at 9, 11, 14; see also 1886 RURAL REGISTER, *supra* note 41, at 26; LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 26.

⁴³ See 1870–1880, *supra* note 36; 1890–1900, *supra* note 35. Henderson's lima bean derived from a low bean-bearing bush that an African American farmer had found growing in his field. He sold seed from the bush to a Richmond seedsman, who, in turn, sold the stock to Henderson. Henderson worked to stabilize it for several years before offering it for sale. 1870–1880, *supra* note 36.

⁴⁴ LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 5-6, 9-10.

⁴⁵ 1850–1860, *supra* note 37. For two colored illustration of vegetables, see *Part of America*, *supra* note 8. For black-and-white engravings, see, for example, JAMES M. THORBURN & CO., ANNUAL DESCRIPTIVE CATALOGUE OF SEEDS 8 (1881) (on file with UDEL), and RICHMAN, *supra* note 27, at 8-10. Richman's book includes many samples

III. LANDRETH'S PROTECTS ITS BRAND

As the seed industry expanded, it came to be marked by two types of suppliers. There were proprietary seed houses, often owned by an individual, a family, or partners — for example, Landreth's, Thorburn's, or Buist's — which grew their own seed or obtained it from trusted sources. And there were commission houses, which bought seed from farmers and seed growers and sold them to stores and directly to farmers and gardeners.⁴⁶

Some members of both groups were said to engage in meretricious and even fraudulent practices. They reportedly sold impure batches of seed — bags, boxes, and paper packages that contained seeds of varieties different from those on the labels or were adulterated with weeds, or seeds that could not be counted on to germinate, and that, if they did, produced low-yielding or low-quality crops.⁴⁷ These practices were not too difficult to pull off since it was virtually impossible to tell simply by inspection what plant or plant quality a seed would produce. One could think by analogy of a bottle of wine labeled, say, Chateau Lafitte, that upon drinking proves to be a blend of mediocre varieties, or worse.

Landreth's promoted itself and its seeds in contradistinction to these practices and pioneered ways to deal with them. The firm, which grew steadily through the century, enjoyed high respect both locally and nationally. The founder and his son, also named David, who joined the firm in 1820, were pillars of Philadelphia's civic society — leading members, for example, of the Pennsylvania Society for Promoting Agriculture and of the Pennsylvania Horticultural Society. When the U.S. Navy sent Commander Matthew C. Perry to Japan, in 1852, the federal government contracted with Landreth's to pack hundreds of pounds of seed into sealed glass containers to be sent with the expedition as gifts to the Japanese people. Upon his return, in 1855, Perry gave Landreth's hundreds of varieties of Japanese trees, plants,

of color and black-and-white illustrations in seed catalogues. *See id.* at 44-110. On the development and the use of color lithography in plant and seed catalogues and elsewhere in the United States, see generally JAY T. LAST, *THE COLOR EXPLOSION: NINETEENTH-CENTURY AMERICAN LITHOGRAPHY* (2006).

⁴⁶ The commission system and its flaws are described in *The History of a Cabbage Seed*, reprinted in LANDRETH & SON, *KITCHEN-GARDEN*, *supra* note 17, at 28-29; 1886 *RURAL REGISTER*, *supra* note 41, at 28-29.

⁴⁷ The hazards in the seed industry are evident from the measures taken to combat them that are discussed in the rest of this article.

and shrubs, the first such major importation into the United States for cultivation and distribution.⁴⁸

Landreth's claimed high merit for the seeds it offered, touting them as reputable and reliable brands, and devising means, extra-legal as well as legal, to protect its brands against nefarious interlopers. Unlike many other importers, Landreth's had from the outset aimed to develop a brand identity for its seeds and, over the years, made the brand all the more distinctive by the features that it represented. Landreth's tested its seeds prior to selling them, starting with seven acres devoted to the purpose and expanding during the firm's first century to several thousand acres — more, it averred, than any other seed establishment in the world — including some six-hundred acres in Bloomsdale, on the banks of the Delaware near Bristol, Pennsylvania. Several of the fields were in different parts of the country so that the seeds could be acclimated to different climates and soils.⁴⁹ The Landreths explained repeatedly to their customers, as they said in 1847, that only if a firm grew its own seed could “the quality of Garden Seeds be fully known, nor purchasers honestly assured the articles are such as they purport to be, inasmuch as *neither texture nor complexion is an index of age or quality.*”⁵⁰

Landreth's catalogues emphasized that the firm sold only fresh seed that it grew itself. Customers were invited to see the grounds in Bloomsdale, and later editions of the catalogues included pictures of their extensive Bloomsdale installations.⁵¹ Landreth's ensured that its seeds were fresh by burning whatever stock remained unsold at the end of the planting season. Landreth's commitment to freshness differentiated it from the commission houses, which were said to take back unsold seed from merchants, repackage them, and offer them for sale the next year.⁵² In 1887, Landreth's offered to burn even their unsold seed still in the possession of merchants, reimbursing the

⁴⁸ See 1850–1860, *supra* note 37; *The D. Landreth Seed Co. Historical Timeline*, SAVESEEDS.ORG, http://www.saveseedsof.org/biography/landreth/landreth_timeline.html (last visited Aug. 2012).

⁴⁹ LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 2, 31; 1886 RURAL REGISTER, *supra* note 41, at 2, 31.

⁵⁰ 1847 CATALOGUE, *supra* note 41, at 2. The firm had begun making this point as early as 1824. See LANDRETH & LANDRETH, 1824 CATALOGUE, *supra* note 9, at 47; see also 1880–1890, *supra* note 37.

⁵¹ See LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 32; 1886 RURAL REGISTER, *supra* note 41, at 32.

⁵² See LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 28-29; *The History of a Cabbage Seed*, *supra* note 46, at 28-29.

merchants for the cost.⁵³ In 1903, the year after its seed house at Bloomsdale burned down, the firm turned tragedy to advantage by advertising that customers could be one-hundred percent certain that all Landreth's seeds the next season would be indisputably fresh.⁵⁴

Landreth's sold its seeds in small boxes and packages for home gardeners. (The practice of purveying seeds in small paper envelopes had been pioneered by the Shaker communities, which earned sizable income from their agricultural enterprises.)⁵⁵ The house dated its packages, a practice it thought should be used by the entire seed trade, noting that not until it was adopted would the seed business "be conducted upon a healthy basis, as packets not bearing the date of issue may be offered to planters years after the seeds have lost all vitality."⁵⁶ Earlier, in 1847, Landreth's had begun selling its seed boxes with warrants of freshness on the labels.⁵⁷

Landreth's catalogues included testimonials to the merits of its seeds from satisfied buyers. In its *Kitchen-Garden Catalogue* for 1886, the firm published a sample of what it said were 2,000 commendations from nine states and the District of Columbia, including, for example, an endorsement of Landreth's Winter Wheat, then in its fourth season of trial: "Hundreds have been to see the Wheat, all say it beats any Wheat they ever saw."⁵⁸ The authors of most of the endorsements were identified by name and place, and one testimonial — praise for the yield of Landreth's several varieties of cabbages — was described as signed and witnessed.⁵⁹

Beginning in the late 1840s, Landreth's, further assuring customers of the high quality of its seeds, stressed that it was now offering as few imported seeds as possible. Its catalogues claimed that foreign seeds might be cheaper than American seeds, but they were not as vital as native American productions. The firm, adding an increasingly strong note of nationalism to its brand identification after the Civil War, emphasized in its advertisements that it provided "American seeds for the American climate."⁶⁰ In its catalogue for 1886, the company called

⁵³ 1887 RURAL REGISTER, *supra* note 34, at 18.

⁵⁴ See D. LANDRETH & SONS, LANDRETHS' SEED CATALOGUE 1 (1903) (on file with UDEL).

⁵⁵ See 1836 CATALOGUE, *supra* note 9, at 12; LANDRETH & LANDRETH, 1824 CATALOGUE, *supra* note 9, at 47; LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 3; RICHMAN, *supra* note 27, at 9; 1886 RURAL REGISTER, *supra* note 41, at 3.

⁵⁶ 1887 RURAL REGISTER, *supra* note 34, at 18.

⁵⁷ 1847 CATALOGUE, *supra* note 41, at Cover.

⁵⁸ LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 27.

⁵⁹ See *id.* at 30.

⁶⁰ *Id.* at Cover, 16; 1887 RURAL REGISTER, *supra* note 34, at 18; see LANDRETH &

itself “preeminently the AMERICAN SEED HOUSE,” adding that “[we] at all times fly the American Flag.”⁶¹ By then, capitalizing on its origins in Philadelphia in the period of the Revolution, it had made the Liberty Bell its graphic logo.⁶²

Some competitors faulted Landreth’s for playing excessively on its reputation and longevity, adding to boot that their prices were too high.⁶³ Landreth’s derided the accusation, defending its commitment to quality seeds precisely in terms of the biological economy of sexual reproduction. “PURITY PRESERVED,” its 1883 catalogue proclaimed, explaining:

It is natural, both in animal and vegetable life, for stock to run out. The cattle-breeder, understanding this, purchases new animals; the wool-grower buys expensive bucks; the horseman breeds to noted studs. If this were not observed, our boasted herds and flocks would become worse than unprofitable.

So it is with Seeds; and such has always been our practice. Peas are not an exception, but need the watchful eye and ready hand to remove all degenerate vines. It may be said that others can do this; sometimes they do; but in ninety-nine cases in one hundred they do not, as the process of selection takes time, and the diminished yield seems money out of pocket.⁶⁴

Landreth’s warned seed consumers against allowing price — without regard to quality — to determine their purchases, noting: “It would be as unwise as for a sick man who wanted to get well, to purchase cheap medicines.”⁶⁵ Landreth’s would not try to sell at prices lower than the level at which quality stocks could be produced. The demand for low-priced goods by some merchants has led to “miserable stocks” on the market:

[C]ommon and low-grade plants of every form are more productive of seed than those of high breeding. Some seed growers, to meet this call for low prices, let the crops go without the eradication of the sports and maldevelopments,

SONS, PEDIGREE TURNIP SEEDS, *supra* note 9, at 13; *see also* 1847 CATALOGUE, *supra* note 41, at Cover.

⁶¹ LANDRETH & SON, KITCHEN-GARDEN, *supra* note 17, at 16.

⁶² *See*, for example, the logo of the Liberty Bell on the back cover of 1887 RURAL REGISTER, *supra* note 34.

⁶³ *See id.* at 17.

⁶⁴ LANDRETH & SONS, PEDIGREE TURNIP SEEDS, *supra* note 9, at 15.

⁶⁵ 1887 RURAL REGISTER, *supra* note 34, at 9.

thus saving themselves the labor, while at the same time securing a larger return of seed.⁶⁶

Landreth's emphasized, "We will not be a party to the debasing of the seed trade."⁶⁷

Landreth's stressed that it was difficult to discern the quality of garden seeds visually. "If the character of Seeds carried their value upon their face, as cotton, sugar, and other staple goods, this charge would amount to nothing, but unfortunately the character of Garden Seeds cannot be determined by inspection, an entire season must pass before their respective values are determined."⁶⁸ Given that simple biological fact, farmers and gardeners would be best served by purchasing seeds in which they could have confidence even if they cost more. As Landreth's put it, "The BEST is certainly the CHEAPEST."⁶⁹

Landreth's had to defend its brand not only against price attacks, but also against frauds and cheats, sellers who offered seeds under Landreth's name that were not Landreth's seeds. The firm was particularly exercised to protect the brand identity of several varieties that had originated in its proof farms, including Landreth's Bloomsdale Spinach and Landreth's Winter Wheat. It was passionate about protecting Landreth's Extra Early Peas, a kind of heirloom for the firm that it had introduced in 1823 and, so it noted in an 1883 catalogue, had "since kept in their original *purity* by unceasing labor and attention."⁷⁰ Landreth's aimed "to check the enormous fraud practiced by irresponsible parties who alike injured the conscientious merchant, the consumer, and ourselves by palming upon the public as LANDRETHS' EXTRA EARLY PEAS, stock of which we had no knowledge, and [is] of doubtful quality at best."⁷¹

Landreth's adopted a three-pronged strategy to protect its offerings. Taking advantage of the federal trademark law, which had been enacted in 1881, it trademarked the Liberty Bell logo and the brand names *Landreth* and *Landreth's*. Beginning in 1878, it sold each of the three varieties in distinctive labeled papers, boxes, and bags. The pea and spinach seeds, moreover, were shipped in, respectively, red and blue muslin bags, and the wheat in white duck bags. All were fastened,

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.* at 17.

⁶⁹ *Id.*

⁷⁰ LANDRETH & SONS, PEDIGREE TURNIP SEEDS, *supra* note 9, at 14.

⁷¹ *Id.* at 15.

as a catalogue said, with “wire and lead seal (a Bell), bearing the stamp, ‘Landreth, Phila., Trade Mark.’”⁷² The firm claimed that its system of selling the peas and spinach in sealed bags of special color and bearing the trademark was registered with the Commissioner of Patents, and it put readers on notice that “all infringements will be prosecuted under the law.”⁷³

Landreth spotlighted its protective strategies in its advertising, boldly declaring: “BEWARE OF DECEPTION!” and warning would-be buyers of its Bloomsdale Spinach: “*Beware of spurious seed under this name* — NONE GENUINE EXCEPT IN OUR SEALED BAGS AND PACKAGES.”⁷⁴ Landreth noted that it guaranteed its lead-sealed bags of seeds only “so long as the seal remains unbroken” and that “[a]ny Extra Early Peas offered loose in bulk, as Landreth’s, are fraudulent.”⁷⁵

Landreth’s gave no quarter in protecting its name. In 1883, a man named Albert Landreth moved from Philadelphia to Manitowoc, Wisconsin, to undertake the growing of peas for the production of seed.⁷⁶ Perhaps he had some connection to the Landreth firm or family, but when he started selling seeds as “Landreth’s,” the company in Philadelphia sued him for misappropriation of its trademarked name. Landreth’s won and touted its victory in a “CIRCULAR” printed in its *Rural Register and Almanac* for 1887, declaring that it had gained a ruling in a trademark case in the U.S. Court of the Eastern District of Wisconsin under which it was “protected in the exclusive use of the seed-dealing designation of ‘LANDRETH’ OR ‘LANDRETHS’ . . . as attached to a seed package, circular, price-list or advertisement.”⁷⁷ The firm made clear “that any one selling or advertising seeds as LANDRETHS,” without authorization, would be “subject to injunction and damages,” adding that the firm would “not hesitate to take steps to enjoin all who improperly make use of our name.”⁷⁸

“This decision is of value to every Seedsman of reputation, as it equally protects others with ourselves,” Landreth’s declared of its

⁷² See 1887 RURAL REGISTER, *supra* note 34, at 49, 61.

⁷³ *Id.* at 61.

⁷⁴ LANDRETH & SONS, PEDIGREE TURNIP SEEDS, *supra* note 9, at 16.

⁷⁵ 1887 RURAL REGISTER, *supra* note 34, at 49, 61; see LANDRETH & SONS, PEDIGREE TURNIP SEEDS, *supra* note 9, at 16.

⁷⁶ Timothy R. Eggen, *History of Lakeside Packing Company 1887–1987: A Century of Quality*, OCCUPATIONAL MONOGRAPH 62, 1987, at 1, available at <http://images.library.wisc.edu/WI/EFacs/MTWCImages/OccSeries/Monograph62/reference/wi.monograph62.i0001.pdf>.

⁷⁷ 1887 RURAL REGISTER, *supra* note 34, at 65.

⁷⁸ *Id.*

victory.⁷⁹ The protection covered every reputable seedsman's brand name — Landreth's called it "his recognized Firm designation as an indicia of his issue" — and safeguarded him "somewhat in the enjoyment of his skill and application."⁸⁰ The "skill and application" was shorthand for the investment of time, knowledge, and effort in the selection and propagation of new varieties that would advantage both growers in their production for market and seed houses in the profits of their businesses. With the seed enterprise increasingly energized by returns on investment measured in dollars rather than in learning and display, the free-flowing exchanges of the Bartram family's day were giving way to a new regime. The seedsmen had, over the course of the nineteenth century, come to place a premium on protecting not only their brand names as such, but also on what we can recognize as the intellectual property in the seeds that the brands represented. Landreth's resort to the new trademark law was emblematic of the drive, then beginning, towards the protection of intellectual property by multiple means, but especially through the law, in the material objects of the living world.

⁷⁹ *Id.*

⁸⁰ *Id.* Albert Landreth switched from raising and selling pea seeds to canning peas, starting the highly successful Lakeside Packing Company, itself a well-known brand. See Eggen, *supra* note 76, at 1.