Case Western Reserve Law Review

Case Western Reserve Law Review

Volume 71 | Issue 2

Article 5

2020

Oliver Evans and the Framing of American Patent Law

Christopher Beauchamp

CASE WESTERN RESERVE LAW REVIEW · VOLUME 71 · ISSUE 2 · 2020

OLIVER EVANS AND THE FRAMING OF AMERICAN PATENT LAW

Christopher Beauchamp†

CONTENTS

† Professor of Law, Brooklyn Law School. This article has benefited greatly from the comments and suggestions of Lionel Bently, Oren Bracha, Anisha Dasgupta, Con Diaz, John Duffy, Richard Epstein, Tomás Gómez-Arostegui, Gerard Magliocca, Adam Mossoff, Michael Risch, Josh Sarnoff, Jeremy Sheff, Kara Swanson, and participants in the NYU Law School Classical Liberal Institute's symposium on "The Rise of Intellectual Property in the Eighteenth and Nineteenth Centuries," of which this contribution forms a part. Special thanks are due to the editors of the Case Western Reserve Law Review, including Rachel Lamparelli, Amy Rubenstein, Bridget McCusker, Jacqueline Kett, Reagan Joy, Zhaocheng Li, Sarah Schneider, and Matthew Casselberry, for their thoughtful and generous editing under the exceptionally difficult circumstances of 2020-2021.

INTRODUCTION

Oliver Evans finally snapped one day in May of 1809. He had been a patent holder for more than twenty years, reaching back to the years before the U.S. Constitution and the first federal patent law. For Evans, these had been two decades of litigation, lobbying, and ceaseless struggle to promote himself and his flour-milling machines. Now came the final straw: a justice of the U.S. Supreme Court, a past antagonist of Evans, delivering an opinion "highly damaging to the rights of inventors" mere days after having declared in court that a patent right was an "infringement of public right."[1]

Evans left his engineering works on Philadelphia's Vine Street and went home. He gathered his family and brought out a thick bundle of papers: all the drawings, specifications, plans, and notes of inventions that he had not yet put into public use. It was for his family's own good, he announced, that he must destroy his work, lest his children and grandchildren be led into ruin and persecution as he had been. All burst into tears, before unanimously signaling their assent, and Evans dumped his inventions into the fire.[2]

In Evans's telling, he was the victim of an American patent system that failed to protect inventors. Having been baited by the promise of protection, he was at times "thrown into despair" at being "robbed by law."[3] At one point he publicly renounced further inventive work, "forced to bury my talent with disgust," as he put it, "because a patent in this country is not yet worth the expense of obtaining it."[4] Later historians sympathized, seeing Evans's treatment by the courts as "unfair" handling in what they deemed the law's "'Embarrassing' Era."[5]

---

1. There are several descriptions of this incident in Evans's writings. The quoted language comes from Evans's private notes made at the time and reproduced in GREVILLE BATHE & DOROTHY BATHE, OLIVER EVANS: A CHRONICLE OF EARLY AMERICAN ENGINEERING 158 (1935). It is not clear which opinion of the court so distressed Evans. It may have been offered after the first argument in *Evans v. Weiss*, a case that Evans eventually won but in which the court had initially been "strongly inclined" against him. *See id.* (describing the opinion as "delivered but not made final"); Evans v. Weiss, 8 F. Cas. 888, 889 (C.C.D. Pa. 1809) (No. 4,572) ("[T]he court at the last term, and upon the first argument, felt strongly inclined to give it the construction contended for by the defendant.").

2. *Id.*; Oliver Evans, *On Useful Inventions*, NAT'L INTELLIGENCER, June 9, 1817.

3. OLIVER EVANS, THE YOUNG MILL-WRIGHT AND MILLER'S GUIDE 373 (2d ed. 1807).

4. *Id.*

5. Frank D. Prager, *Trends and Developments in American Patent Law from Jefferson to Clifford (1790–1870)*, part II, 6 AM. J. LEGAL HIST. 45, 48–49 (1962).

To many of his contemporaries, though, Evans and his patent represented quite the opposite. He held a "monopoly" to which the millers and farmers of the country were "tributary" and which he deployed for "the oppression of individuals [and] the exaction of exorbitant sums of money."[6] Evans repeatedly sought and received the special favor of legislatures, both state and federal. Tellingly, when Evans publicly retold the story of burning his inventions in despair, he backdated it three years to 1806—before Congress renewed his most valuable patent, and before he built a system of licensing and litigation that spanned much of the country.[7]

If the complicated birth of United States patent law can be told through the story of a single figure, that person is Oliver Evans. Evans was one of the leading inventors and engineers of the early Republic. He was also its most prominent patentee. Evans's patenting activities spanned the Founding: he received patents from four states in the 1780s, and then, after the United States Constitution authorized federal patents and Congress passed the first patent law in 1790, Evans obtained the third U.S. patent to be granted.[8] His rights became the subject of sustained executive and congressional politicking, culminating in his grant receiving the first legislative extension of a federal patent in 1808, three years after it had expired.[9] The revived (and mightily controversial) patent then loomed over both the politics and the law of the patent system. Evans brought four of the U.S. Supreme Court's first six patent cases. And he pioneered large-scale patent enforcement in the early Republic, creating and directing a multi-state network of lawyers and agents to assert his rights, as well as issuing what must surely have been the first demand letter to a sitting U.S. President. Throughout, the articulate and frequently outraged Evans was the nation's leading polemicist for the rights of patentees, damning the shortcomings of the law and the perfidy of his opponents in letters, pamphlets, and sarcastic verse.

Even if Evans only served as a Zelig-like figure, repeatedly popping up at the major waypoints of Founding-era patent history, he would be

6. AMENDMENT PROPOSED TO THE ACT CONTINUING CERTAIN PATENT RIGHTS TO OLIVER EVANS, S. MISC. DOC. No. 13-365, at 237–38 (2d Sess. 1814).

7. *Compare, e.g.*, Oliver Evans Memorial to Congress, *reprinted in* Oliver Evans, *On Useful Inventions*, NAT'L INTELLIGENCER, June 9, 1817, at ("At the age of fifty-one years, despairing of ever receiving any reward from the public"), *with* Evans's private account, *reprinted in* BATHE & BATHE, *supra* note 1, at 158 ("I was then in my 54th year").

8. *See* U.S. Patent Office, A List of Patents Granted by the United States from April 10, 1790, to December 31, 1836, with an Appendix Containing Reports on the Condition of the Patent-office in 1823, 1830, and 1931, 4 (Washington, D.C. 1872).

9. An Act for the relief of Oliver Evans, ch. 13, 6 Stat. 70, 70–71 (1808).

a crucial test case for several important historical questions, including the continuity or discontinuity between the pre-constitutional state and post-1790 federal regimes, the role played by natural-rights conceptions of the patent, and the enforceability of inventors' rights in the early Republic. But Evans should stand for more than that. The history of patent law in the late eighteenth and early nineteenth centuries was not, by and large, driven by judicial abstractions or debates of political principle; instead, it was worked out in practice and shaped by the cases that came to the fore. And of the concrete contexts in which the patent right was hammered out, none were more Influential than the cases and controversies of Oliver Evans.

I. FRAMING STATE AND FEDERAL PATENTS

State patents have played little role in recent scrutiny of the Founding-era patent system. The search for precedent to the Constitution's patent clause and to the first patent law more commonly leads to English antecedents.[10] To some extent, this benign neglect is fair: state patents were a collection of ad hoc legislative grants rather than a general system of exclusive rights, and they lacked crucial features of the federal scheme adopted in 1790. But there was more continuity between the state and federal regimes than first meets the eye.

Oliver Evans is an ideal candidate to test the connection. As the holder of four state patents, he enjoyed as much state protection as any inventor and more than most. And he bridged the constitutional divide: by obtaining a federal grant in 1790, Evans became the first inventor to traverse the two regimes.

A. Engines and Ingenuity

Oliver Evans was born in Newport, Delaware in 1755, the son of a shoemaker and farmer.[11] He was apprenticed in his teens to a wheelwright and wagonmaker, and it was during this period that he began both his technical education and his restless mechanical tinkering. Evans later attributed his interest in steam engineering to a tale of a local blacksmith's boy who filled a stopped-up gun barrel with water and heated the end to produce an explosion: at that moment, Evans recalled, "[i]t immediately occurred to me that there was a power

10. *See, e.g.*, *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365 *passim* (2018). But—tipping my hand here—see Christopher Beauchamp, *Repealing Patents*, 72 VAND. L. REV. 647, 685 (2019) (arguing that American law consists of significant departures from English practice, not just continuation of English practice).

11. *See* BATHE & BATHE, *supra* note 1, at 1–8 (discussing the details of Evans's early life); EUGENE S. FERGUSON, OLIVER EVANS: INVENTIVE GENIUS OF THE AMERICAN INDUSTRIAL REVOLUTION 11–13 (1980).

capable of propelling any waggon [sic]."[12] He later developed an interest in wire manufacturing and, while laid up from a scythe injury, designed a machine that would cut and bend the wire teeth used in carding wool and cotton.[13] According to Evans, his short-lived efforts in that area attracted a mixture of ridicule from his family, a polite rebuff from the Pennsylvania legislature (which he had approached for a manufacturing subsidy), and swift copying of his demonstration prototype by the card manufacturers of Wilmington and Philadelphia.[14] Having failed to gain an inventive foothold, by 1782 he was living at Tuckahoe, on the Eastern Shore of Maryland, and running a general store with his younger brother Joseph.[15]

It was in Maryland that Evans conceived the first elements of the system for which he would become famous: the mechanized flour mill. Milling at that time was labor-intensive, hard, and unsanitary work, in which sacks of wheat were hauled to the top of the mill and progressed downward through a series of hand-operated processes and water-powered grindstones.[16] Starting in 1783, Evans began to piece together a series of machines that would collectively form a continuous automated milling process. The first was an elevator, a series of buckets on a moving belt that would lift the wheat in place of the traditional two-man hoist. The second was the "hopperboy": a rotating rake that spread, cooled, and dried the ground meal on an upper floor of the mill while raking it into a hopper for bolting, or sifting. The hopperboy acquired its name because the job had hitherto been performed by a boy with a rake.[17]

12. ELIJAH GALLOWAY, HISTORY OF THE STEAM ENGINE, FROM ITS FIRST INVENTION TO THE PRESENT TIME 93–94 (London, Cowie & Co. 1826).

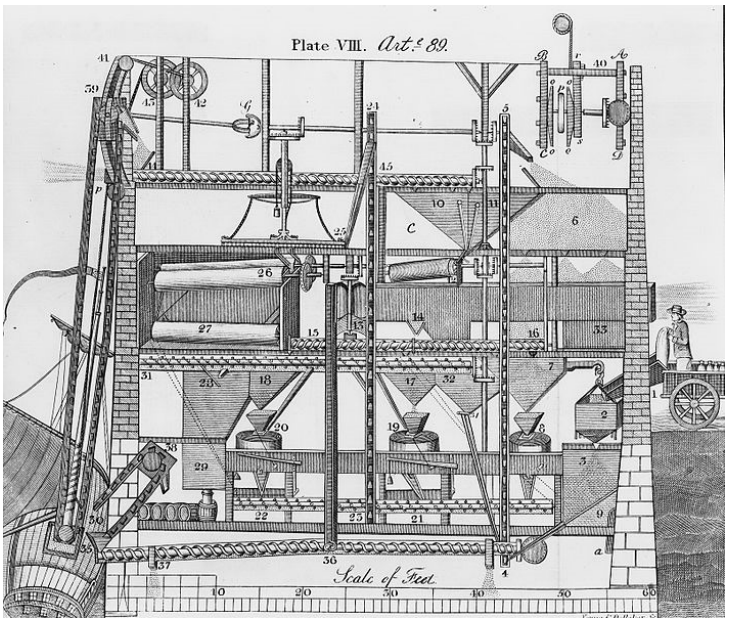
13. *See* PATRICK N.I. ELISHA, PATENT RIGHT OPPRESSION EXPOSED; OR, KNAVERY DETECTED. IN AN ADDRESS, TO UNITE ALL GOOD PEOPLE TO OBTAIN A REPEAL OF THE PATENT LAWS 20–21 (Philadelphia, 2d ed. 1814) [hereinafter ELISHA, PATENT RIGHT OPPRESSION] (written by Oliver Evans under pseudonym).

14. *Id.* at 21–23.

15. *See* BATHE & BATHE, *supra* note 1, at 9.

16. *See* BATHE & BATHE, *supra* note 1, at 12; FERGUSON, *supra* note 11, at 12.

17. *See* BATHE & BATHE, *supra* note 1, at 11; FERGUSON, *supra* note 11, at 19–21.



Evan's flour mill illustrated in his Young Mill-Wright and Miller's Guide (1795)

It was not long before Evans put his designs into practice. He and two of his brothers had bought a portion of their father's land near Newport in 1782, and now constructed a mill at a place called Red Clay Creek.[18] The mill was operative by 1785. Once his system was in place, Evans tried to interest local millers, but with little success. The prosperous Quaker millers of Wilmington's Brandywine Creek were uninterested, at least in paying Evans for the use of his invention.[19] Evans's later accounts of this period recalled a mixture of clannish resistance, folksy skepticism ("Oliver, you cannot make water run up hill, neither can you make [hopper] boys without the help of women."), and a calculating refusal to absorb the costs of experimentation.[20]

Snubbed by the Brandywine millers, Evans turned to a different audience: the state. His friend George Latimer, a wealthy mill-owner's son who had previously supported Evans's carding-wire venture, was now a member of the Delaware Assembly. It was Latimer who suggested that Evans petition the state for an exclusive right to his inventions.[21] There was little local precedent: Delaware had never granted a colonial

18. *See* Bathe & Bathe, *supra* note 1, at 12–13.

19. Ferguson, *supra* note 11, at 24–25.

20. Elisha, Patent Right Oppression, *supra* note 13, at 156; *see also* Oliver Evans, Oliver Evans to His Counsel, Who are Engaged in Defence of His Patent Rights, for the Improvements he has Invented 9 (n.p. 1817); Ferguson, *supra* note 11, at 22, 25.

21. *See* Elisha, Patent Right Oppression, *supra* note 13, at 156–57.

or state patent for an invention,[22] though neighboring Pennsylvania and Maryland had both done so earlier in 1785, and the rival steamboat inventors James Rumsey and John Fitch were then noisily campaigning for state monopolies in the mid-Atlantic states.[23] On the other hand, Latimer's patronage offered Evans immediate traction with Delaware's governing elite. George's father, James Latimer, had been President of the convention that framed Delaware's first state constitution; his brother Henry had recently been elected to the Continental Congress and would later serve in the U.S. Congress as Delaware's representative and senator.[24]

With George's support, Evans petitioned for state protection in Delaware on January 16, 1786.[25] Shortly afterward, he petitioned for exclusive rights in Maryland and in Pennsylvania, where again George Latimer lobbied the legislature on his behalf.[26] Each state granted a legislative patent the following year: Pennsylvania in March 1787,[27] Maryland in May,[28] and Delaware in November.[29] Evans added a fourth

22. *See* BRUCE W. BUGBEE, GENESIS OF AMERICAN PATENT AND COPYRIGHT LAW 73 (1967).

23. *See id.* at 90, 95–97; Frank D. Prager, *The Steamboat Pioneers Before the Founding Fathers*, 37 J. PAT. OFF. SOC'Y 486, 486 (1955).

24. *See* 2 J. THOMAS SCHARF, HISTORY OF DELAWARE 1609–1888, at 735 (Philadelphia, L.J. Richards & Co. 1888).

25. *See* BATHE & BATHE, *supra* note 1, at 15.

26. ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 25, 166. A member of the bi-state "Philadelawarean" elite, George Latimer would move to Philadelphia in the later 1780s and become speaker of the Pennsylvania House of Representatives in 1794–98. *See* John A. Munroe, *The Philadelawareans: A Study in the Relations Between Philadelphia and Delaware in the Late Eighteenth Century*, 69 PA. MAG. OF HIST. & BIOGRAPHY 128 (1945); George Latimer 1793–1798, PA. HOUSE OF REPRESENTATIVES: HOUSE SPEAKER BIOGRAPHIES, https://www.legis.state.pa.us/cfdocs/legis/SpeakerBios/SpeakerBio.cfm?id=104 [https://perma.cc/VVS2-JUYE] (last visited Dec. 12, 2020).

27. An Act to Grant to Oliver Evans for a Term of Years the Sole and Exclusive Rights of Making and Selling within this Commonwealth the Machines Herein Described, *in* 12 THE STATUTES AT LARGE OF PENNSYLVANIA FROM 1682 TO 1801, at 483–85 (1906) [hereinafter Evans Pennsylvania Patent].

28. An Act to Grant to Oliver Evans, for a Term of Years, the Sole and Exclusive Right of Making and Selling within this State the Machines Herein Described, 1787 Md. Laws 215 [hereinafter Evans Maryland Patent].

29. An Act to Grant to Oliver Evans, for a Term of Years, the Sole and Exclusive Right of Making and Selling within this State the Machines Herein Described, 2 Del. Laws 915–17 (1787) [hereinafter Evans Delaware Patent].

state grant when New Hampshire granted him exclusive rights in February 1789.[30]

B. What Were State Patents?

What were state patents for invention in 1786–1787? They were not generally called patents, for a start. The statutory grants of the pre-Constitutional period spoke in terms of "exclusive right" or "exclusive privilege;" the word "patent" appeared in state statute-books only in reference to grants of land.[31] As exclusive privileges, rights to invention were not sharply distinguished from other state franchises, such as exclusive rights granted to the operators of ferries or stage carriages. Grants for inventions were part of a general impulse towards support of manufacturing and internal improvements in the new states, compounded by pressure to stoke domestic industry after postwar depression struck in 1784,[32] and drawing support from skilled urban workingmen who formed an increasingly organized pro-manufacturing interest in the second half of the decade.[33] State exclusive rights drew on a scattered tradition of colonial patents for inventions. But they remained notably ad hoc: with a range of approaches to term, specification, and remedies for infringement, there are few signs that the states were tracking practices or developments in the English patent law of the time.[34]

We know little about practice under the state patents obtained in the 1780s, Evans's patents among them. Historians have found no record of infringement litigation during the period, and evidence of financing, licensing, or assignment is scarce.[35] The surviving evidence is limited to matters of form: the form of petitioning for exclusive rights

30. An Act to Grant to Oliver Evans, for a Term of Years, the Sole and Exclusive Right of Making and Selling within this State the Machines Herein Described, *in* 5 LAWS OF NEW HAMPSHIRE 401–02 (Henry Harrison Metcalf ed., 1916) [hereinafter Evans New Hampshire Patent].

31. Search Results for the Word "Patent" in State Statutes, HEINONLINE, https://heinonline.org/HOL/Welcome (search in HeinOnline for "State Statutes: A Historical Archive" database; search "patent" within the database; then limit the date from 1780 to 1787).

32. *See* BUGBEE, *supra* note 22, at 84–85.

33. *See, e.g.*, CHARLES G. STEFFEN, THE MECHANICS OF BALTIMORE: WORKERS AND POLITICS IN THE AGE OF REVOLUTION 1763–1812, at 81–82 (1984) (describing the emergence in Baltimore of a "'mechanic interest' that no politician could afford to ignore").

34. In one partial exception, state patents gravitated toward the English fourteen-year patent term. *See* BUGBEE, *supra* note 22, at 88.

35. One exception is an apparent profit-sharing agreement between James Rumsey and James McMechen over the former's steamboat rights. *See Letters of James Rumsey, Inventor of the Steamboat*, 24 WM. & MARY Q. HIST. MAG. 154, 168–69 (1916).

and the forms in which they were granted. Still, these forms are revealing. The language in which petitioners asked for protection and the terms in which legislatures answered reveal a good deal about their respective assumptions and purposes.

Oliver Evans's Delaware petition is a rare surviving petition for a state patent.[36] Two things are striking about the document. First, the author did not expect the legislature to apply strict standards of either novelty or reduction to practice for his inventions. The petition described Evans's machine for making card teeth as "*perhaps* entirely new."[37] When it came to Evans's mill machinery, the petitioner described himself as "altogether convinced that he can erect the following Machines (not yet extant)."[38]

This prospectus-like language may have reflected Evans's actual sense that his machines were not yet finished as of January 1786. Or it may have played to the second prominent feature of the petition: its insistence that Evans required an incentive to complete the invention. While the machines in question would "very much lessen the labour and consequently the expenses of the Milling Business," Evans suggested, "the expense and labour attending the inventing, contriving, and erecting, the above mentioned Machines . . . would exceed any private emolument likely to be derived to himself, unless he had some exclusive right to make, and cause to be used, said machines[.]"[39] Not for the last time, Evans argued that the grant of an exclusive right was a *sine qua non*, without which his pending inventive work would be withheld.

Up to this point, Evans's petitioning fits the prevailing historical view of state patents as developmental grants, concerned above all with creating incentives for the introduction of new technology. But the germ of another perspective began to emerge as Evans grew more confident in his machinery and his prospects. In January 1787, after a positive report on his milling inventions by a committee of the legislature, Evans wrote again to the General Assembly, this time asking that the bill's proposed fifteen-year term of exclusivity be lengthened to twenty-five years.[40] Again, he stressed his need for an up-front incentive to bring

36. The petition is in the collections of the Delaware Historical Society and is reproduced in its entirety in Bathe & Bathe, *supra* note 1, at 15.

37. *Id.* (emphasis added).

38. *Id.*

39. *Id.*

40. *See* Letter from Oliver Evans to the Delaware General Assembly (Jan. 3, 1787), *reprinted in* Bathe & Bathe, *supra* note 1, at 16.

his technology into use.[41] But now Evans began publicly to identify himself as a distinctive figure—an inventor. "If Providence has endowed me with a Genius Capable of Invention Probably I may render my Country greater Services in this than any other line I can engage in," he declared, adding that "Nature if attended to will Direct each of us to the Studies She has adapted us for."[42] A group of Evans's customers added a letter of support in similar terms, predicting that Evans would improve on his machines based on "the Knowledge we have of Your Petitioners Ginius [sic]."[43]

Oren Bracha has noted that the idea of the inventor of genius was promoted by patentees under the new federal patent laws of the 1790s and early 1800s.[44] (The term "genius" was then a capacious term encompassing innate creative or intellectual capacity; it sometimes, though not always, carried the connotations of exceptional brilliance that the word has today). State patents for invention in the 1780s typically did not dwell on the status of inventors or on the idea of genius more generally.

Another type of state-conferred right did, however. Most states adopted copyright statutes between 1783 and 1786 (Delaware was the one exception),[45] and several of these statutes referred to the encour–agement of "literature and genius."[46] Copyright brought with it a different set of assumptions about the basis of the grant: in particular, arguments that the protection of creative works secured the natural right of the creator in his creation. These assumptions were principally shaped by the British "literary property" debates of the 1760s and 1770s, in which publishers had sought to push their protection beyond

41. *See id.* ("I have concluded that it will not prove to my advantage to proceed further in these (hitherto) unprofitable Studies untill [sic] I obtain of different States an exclusive right . . . .").

42. *Id.*

43. Letter from Caleb Byrnes, Joshua Stroud, James Stroud, Marshall & Stroud, and William Byrnes to the Delaware General Assembly (Jan. 24, 1787), *reprinted in* BATHE & BATHE, *supra* note 1, at 17.

44. Oren Bracha, *Geniuses and Owners: The Construction of Inventors and the Emergence of American Intellectual Property*, *in* TRANSFORMATIONS OF AMERICAN LAW: ESSAYS IN HONOR OF PROFESSOR MORTON J. HORWITZ 375–77 (Daniel W. Hamilton & Alfred L. Brophy eds., 2009) [hereinafter Bracha, *Geniuses and Owners*].

45. *See* Oren Bracha, *United States Copyright, 1672–1909*, *in* RESEARCH HAND–BOOK ON THE HISTORY OF COPYRIGHT LAW 340–41 (Isabella Alexander & H. Tomás Gómez-Arostegui eds., 2016).

46. *See, e.g.*, COPYRIGHT ENACTMENTS OF THE UNITED STATES 1783–1906, at 5 (Thorvald Solberg comp., 2nd ed. 1906) (noting a 1783 Connecticut statute, a 1783 New Hampshire statute, and a 1786 Georgia statute all including in their name "An act for the encouragement of literature and genius").

the scope of statutory copyright by arguing that the author's natural right was protected at common law.[47] Invoking protection for the fruits of one's inventive genius in America in the middle 1780s would have hinted at a similar framing for inventors' rights.

Even so, the meshing of these natural-property ideas with exclusive rights for invention, already discernible in England in the 1770s and 1780s,[48] was tentative in the pre-Constitutional United States. The one state in which a patent made explicit reference to natural right and inventive genius was South Carolina,[49] which was also the only state in which a patent-granting power appeared as part of the state's copyright act.[50] Elsewhere, as in Evans's case, the proposition that inventors were a class laying special claim to their rights *qua* creators was an undertone for now.

The states collectively granted some two dozen patents for inventions in the years before the Constitution, of which Evans received four.[51] As private acts of the state legislatures, each state patent was a customized grant, with no two inventors' rights being exactly alike. On one day in 1788, for example, South Carolina enacted two patents with different remedies for infringement, different conditions on the working or licensing of the inventions, and different disclosure requirements.[52]

---

47. OREN BRACHA, OWNING IDEAS: THE INTELLECTUAL ORIGINS OF AMERICAN INTELLECTUAL PROPERTY 1790–1909, at 12, 238–39 (2016) [hereinafter BRACHA, OWNING IDEAS] (noting that the American state copyright statutes were justified on the same grounds that English advocates used to press for common law copyright, and thus were the equivalent of the 1710 Statute of Anne supported by the 1770s English rhetoric of literary property).

48. *See* Adam Mossoff, *Rethinking the Development of Patents: An Intellectual History, 1550–1800*, 52 HASTINGS L.J. 1255, 1295–1300 (2001).

49. *See* An Ordinance to Secure to Isaac Briggs and William Longstreet, for the Term of Fourteen Years, the Sole and Exclusive Privilege of Using a Newly Constructed Steam Engine Invented by Them, *in* 5 THE STATUTES AT LARGE OF SOUTH CAROLINA 71–72 (Thomas Cooper ed., 1839) [hereinafter Briggs & Longstreet Ordinance] (declaring in its preamble that "principles of natural equity and justice require that authors and inventors should be secured in receiving the profits that may arise from the sale or disposal of their respective writings and discoveries, and such security may encourage men of learning and genius to publish and put in practice such writings and discoveries as may do honor to their country and service to mankind").

50. *See* BUGBEE, *supra* note 22, at 93.

51. *See* BUGBEE, *supra* note 22, at 84–103.

52. *Compare* Briggs & Longstreet Ordinance, *supra* note 49, at 71–72 (stipulating damages for infringement of double the value of every infringing engine, requiring the inventors to put their engine in practice within one year, and instructing them to record with the state an "accur–ate account of the precise principles and construction" of the invention), *with* An Act to Invest in Samuel Knight, and his Assigns, the Exclusive

There was greater standardization for individual inventors across borders: Evans's four state grants differed in some respects, but mostly shared the same language and terms. As such they tell a common story about how rights were conferred and configured. Given the relatively scant record of how state patenting worked in practice, it is worth distilling some of the details of Evans's grants.

1. The Granting Process.

Evans's patents were granted after some process for review and debate, and perhaps for opposition. In the case of Delaware, for which the most records of the process survive, Evans's petition was reviewed by an appointed committee of the state legislature. The inventor appeared in person before this committee in January 1787 and, according to his principal biographers, "explained at great length and with much detail, the reason why he should be considered the original inventor of the machines he specified in his petition."[53] Similar legislative committees reviewed and reported on Evans's petitions in Pennsylvania and Maryland.[54] The criteria applied by these bodies are unknown, but Evans did not get everything he asked for. The Delaware Assembly disregarded most of the machines mentioned in his petition and granted exclusive rights only for the elevator and hopperboy.[55] The Pennsylvania legislature rejected Evans's card machines "because they had got into use" and his milling devices, *other* than the elevator and hopperboy, on grounds that the public had earlier use of similar machinery.[56]

The states also showed a willingness to reject claims that seemed excessively speculative. In his Pennsylvania petition, Evans had included yet another invention: land carriages powered by steam. He later recalled that the Pennsylvania legislature believed his plan "visionary" (in a bad way)[57] and "treated his memorial as if they thought him insane."[58] Undeterred, Evans re-petitioned the Delaware Assembly for a broadly-described "exclusive Right of Propelling all land

Right of Constructing and Vending a Machine for the Pounding of Rice, for the Term Therein Mentioned, *in* 5 THE STATUTES AT LARGE OF SOUTH CAROLINA 69–70 (Thomas Cooper ed., 1839) (setting damages at fifty pounds sterling per infringement, imposing a compulsory license of five pounds on demand, and requiring deposit of "an exact plan or model" of the invention that would be open to public inspection).

53. BATHE & BATHE, *supra* note 1, at 17.

54. *Id.* at 15, 19.

55. *See* Evans Delaware Patent, *supra* note 29, at 915.

56. ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 166.

57. *Id.*

58. *Id.* at 25.

Carriages by the Power of Steam."[59] This proposal passed the Assembly but foundered before Delaware's upper chamber.[60] Only in Maryland was the steam carriage included in his eventual patent.[61] It may have helped that Evans provided a drawing of a model wheel to the Maryland legislature,[62] but it probably mattered more that his steam invention was recommended by the Baltimore merchant Jesse Hollingsworth, a legislator and leader of that city's formidable mechanics' association.[63]

2. Purpose.

On their face, Evans's granted patents stated a functional and pragmatic rationale. Each declared that his covered inventions "will greatly tend to simplify, and render cheap, the manufacture of flour, which is one of the principal staples of this state."[64] (Other than in the inclusion or exclusion of the steam carriage, the wording of Evans's private acts was nearly identical, suggesting that the inventor largely directed their drafting). Evans received his exclusive rights "in order to make adequate compensation . . . for his ingenuity, trouble, and expence [sic]."[65] For now, the compensatory language gave no hint of the arguments from natural right that Evans would later adopt, and instead answered the main theme of his petitions: that invention was a costly endeavor.

Notably, the roles of novelty and geography in this quid pro quo were not always clear. Colonies had granted patents of importation to those who merely introduced technology from outside; states did too, and for a while there was debate over whether the federal regime would do so. Both Delaware and Pennsylvania allowed protection to the components of Evans's petitions that had the strongest claim to novelty and denied the others. Evans made representations during the course of his petitioning about his original inventorship. But it was not clear,

59. Petition from Oliver Evans to the Delaware Assembly (May 28, 1787), *reprinted in* Bathe & Bathe, *supra* note 1, at 19. Evans purported to have "in Various Experiments . . . Invented an entire New Plan of applying said Powers," but would not bear the labor or expense of bringing his plan to completion "without hopes of Considerable profit." *Id.*

60. *See* Minutes of the Council of the Delaware State, From 1776 to 1792, at 1071–72 (Delaware, James Kirk & Son printers, 1886).

61. Evans Maryland Patent, *supra* note 28.

62. Bathe & Bathe, *supra* note 1, at 16.

63. Elisha, Patent Right Oppression, *supra* note 13, at 25; Steffen, *supra* note 33, at 88.

64. *See, e.g.*, Evans Delaware Patent, *supra* note 29, at 915. The Pennsylvania act substituted "Commonwealth" for "state" and the New Hampshire act omitted the "staple" clause, but otherwise the language in each state was identical. *See id.*; Evans Pennsylvania Patent, *supra* note 27, at 483–84.

65. Evans Delaware Patent, *supra* note 29, at 915–16.

for example, whether Pennsylvania rejected his carding and grain-breaking machines because they had been used *in Pennsylvania*, or because they had been used at all.[66] And only Maryland stated in its granting act that it was a defense to infringement if "it shall be proved that the said Oliver Evans was not the original inventor of the machines."[67] It is not a given that lack of novelty would have served as a defense elsewhere.

3. Scope.

Evans's state grants had neither specifications nor claims in the modern sense. The concept of the written disclosure as core of the patent bargain had emerged most visibly in Britain during the 1770s, and a few American state patents beginning as early as 1780 had included a requirement to disclose details of the invention to the public "in order that no person may unknowingly offend and that all after the expiration of the term . . . may be enabled to prosecute the said manufactures to their own advantage."[68] But Evans's grants contained only a single sentence describing all of the inventions covered. Instead, each state's act declared it infringement to make or sell "any hopper-boy or elevator upon the plan of the said Oliver Evans, and constructed as the said hopper-boy or elevator of the said Oliver Evans is, or in the form, similitude or likeness thereof."[69]

This emphasis on covering the broad principles of operation and mechanical equivalents was characteristic of state patents. Evans was actively attempting to persuade millers to adopt his machines, so the acts did not need to focus on compelling him to disclose the invention. And the ex ante *written* definition of the scope of rights seems not to have been a concern for most state patents. Perhaps, as Herbert Hovenkamp has suggested, this reflected their background among other state franchises, such as monopolies and corporate charters, which were more concerned with mobilizing the franchised activity than they were with defining the right.[70] More likely, patents were simply not yet conceived primarily in textual terms: the material invention itself defined the scope of the right, as it would continue to do in some ways well into the nineteenth century. Mushy ideas of novelty also took the

66. *See* ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 166.

67. Evans Maryland Patent, *supra* note 28.

68. An Act to Grant to Henry Guest an Exclusive Right for the Term of Five Years of Making Oil and Blubber from Materials of his own Discovery, in 10 The Statutes at Large of Pennsylvania from 1682 to 1801, at 131, 133 (1906); BUGBEE, *supra* note 22, at 87.

69. Evans Delaware Patent, *supra* note 29, at 916.

70. *See* Herbert Hovenkamp, *The Emergence of Classical American Patent Law*, 58 ARIZ. L. REV. 263, 276–77 (2016).

pressure off needing to define the invention against the prior art. Whatever the reasons, the under-definition of Evans's rights would later become a great theme of his legal career, and his federal patent would eventually be instrumental in working out the law of patent scope and construction.

4. Remedies.

The theory of remedies was unsettled in early American patent acts generally, with monetary recovery for infringement based variously on actual damages, on the price of selling or licensing the invention, on multiples of either of these measures, or on other sums entirely.[71] The Evans patents followed the most common pattern among state grants, which was to use a fixed penalty set by the granting act.[72] In Evans's case this was £100 for a first act of infringement, rising to £150 for repeat offenders.[73] To the extent this tells us anything about the state regime, this "liability rule" protection suggests a taste for easy administrability and state control of valuation, while still providing a penalty stiff enough to deter infringement.

5. Cancellation and Working Requirement.

Finally, the states reserved a power to cancel Evans's rights in return for a large fixed payment, ranging from £1,000 in Delaware to £5,000 in Pennsylvania.[74] This provision was not common in state patents but seems to have appeared where state legislatures thought the invention had a special potential value to the community. James Rumsey's steamboat grants from Virginia and Pennsylvania had included cancellation clauses two years before Evans received his grants, although the prices set for Rumsey's rights (£10,000 and £8,000) were considerably higher.[75] New Hampshire further added another

71. *See, e.g.*, Briggs & Longstreet Ordinance, *supra* note 49. *See generally* BUGBEE, *supra* note 22, at 91–100 (demonstrating differing damages for patent infringements); Patent Act of 1790, ch. 7, § 4, 1 Stat. 109, 111 ("such damages as shall be assessed by a jury"); Patent Act of 1793, ch. 11, § 5, 1 Stat. 318, 322 ("[A] sum, that shall be at least equal to three times the price, for which the patentee has usually sold or licensed to other persons, the use of the said invention . . . ."); An Act to extend the privilege of obtaining patents for useful discoveries and inventions, to certain persons therein mentioned, and to enlarge and define the penalties for violating the rights of patentees, ch. 25, § 3, 2 Stat. 37, 38 (1800) [hereinafter Patent Act of 1800] ("a sum equal to three times the actual damages sustained.").

72. *See, e.g.*, Evans Delaware Patent, *supra* note 29, at 916–17 (demonstrating the fixed penalties set by each act).

73. *See id.*

74. *See id.* at 916; Evans Pennsylvania Patent, *supra* note 27, at 484.

75. *See* BUGBEE, *supra* note 22, at 96–97.

reservation in favor of the public, this one also present in some of the state steamboat patents: what would now be called a "working requirement," making Evans's rights conditional on a builder of his machines residing in New Hampshire within a year of the grant and throughout its seven year term.[76]

Evans had little opportunity to test his state patents. After receiving his mid-Atlantic grants, Oliver sent his brother Joseph Evans on a grand tour of Delaware, Maryland, Virginia, and Pennsylvania, promoting his machines and seeking adopters. Despite offering a free license to the first miller in each county to employ the system, Joseph had no takers.[77] Though discouraged, Oliver continued to develop the automated flour mill, filling out his system with three more grain-handling machines: the conveyer (a kind of Archimedes screw); the drill (a segmented belt used for horizontal movement); and the descender (a gravity-operated belt for downward transport).[78] Finally, during 1789, Evans found a customer progressive enough to adopt his system and prominent enough to impress other millers. This was Jonathan Ellicott, then head of the Ellicott family of wealthy Quaker millers who operated large mills on the Patapsco River near Baltimore. "I have never been with so ingenious a family," Evans wrote in his diary of his visit to the Ellicott mills.[79] Ellicott apparently received his license gratis under the Maryland patent.[80] It was among the last work that Evans's state grants would do. The following year, Evans would replace them with a federal patent.

C. From State to Federal

The federal Patent Act of 1790 was different in many ways from the state grants of exclusive rights. In place of a legislative regime, the act established a board of cabinet-level officials—the Secretaries of State and War and the Attorney General—empowered to grant patents.[81] It also standardized requirements of novelty and disclosure, set a maximum (and in practice, standard) term of fourteen years, and dictated remedies for infringement and a process for challenging invalid grants.[82] For all the differences between state and federal regimes, though, the *inputs* were strikingly similar. When Oliver Evans became

76. *See* Evans New Hampshire Patent, *supra* note 30, at 401.

77. Elisha, Patent Right Oppression, *supra* note 13, at 31–32.

78. Bathe & Bathe, *supra* note 1, at 13–14; Ferguson, *supra* note 11, at 25–26.

79. Bathe & Bathe, *supra* note 1, at 23 n.30.

80. *Id.* at 21.

81. *See* Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 110.

82. *See id.* § 1–2, 4–5.

the first to cross the threshold from state to federal protection, he encountered a familiar process for obtaining the grant. Indeed, it was his and his examiners' lack of adaptation to new forms or formalities that would later break his first federal patent.

The common thread of state and early federal regimes was their basis in petitioning. While the United States in 1790 had set up a general patent law open to all applicants, it retained the character of petition-based, direct-access government in both its origins and working. Indeed, the patent system should be set in the context of a federal government that, from its beginning, functioned in large part through direct petitioning to Congress.[83] Private bills; petitions for relief, pensions, and compensation; the grievances of local communities and their requests for infrastructural development and industrial policy—these were the stuff of much legislative life in the early Congresses. The 1790 patent law came about in large part because Congress was already being pelted with petitions for federal patents.[84] As the legislature worked to set up an infrastructure for addressing petitions in general, the Patent Act was a prominent example of how Congress began to channel the stream of requests into formal evaluation processes.[85]

Evans began to seek federal protection in May of 1790, barely a month after the passage of the Patent Act.[86] The documentary record of his first federal patent is, alas, almost nil. The Patent Office fire of 1836 destroyed most records from before that date, leaving only scattered examples from which to reconstruct early practice.

From such circumstantial and indirect evidence as we have, though, it seems that both Evans's petition and issued patents may have been more akin to state forms than to later U.S. patents. Like his state grants

83. *See* Maggie McKinley, *Petitioning and the Making of the Administrative State*, 127 YALE L.J. 1538, 1565 (2018).

84. *See generally Proceedings in Congress During the Years 1789 and 1790, Relating to the First Patent and Copyright Laws*, 22 J. PAT. OFF. SOC'Y 243 (1940) (documenting the many federal patent petitions Congress received in 1789–90); EDWARD C. WALTERSCHEID, TO PROMOTE THE PROGRESS OF USEFUL ARTS: AMERICAN PATENT LAW AND ADMINISTRATION, 1790–1836, at 115–17 (1998).

85. *See* McKinley, *supra* note 83, at 1565.

86. WALTERSCHEID, *supra* note 84, at 176. Acquiring a national right was by no means automatic: most holders of state exclusive rights did not receive federal patents, at least not for the same inventions, though the most prolific state patentees—Evans and the steamboat inventors John Fitch and James Rumsey—all did. At least three other state patentees later received federal rights for inventions distinct from their state grants: the clockmaker Robert Leslie of Philadelphia, the New Englander Benjamin Dearborn, and Henry Guest of New Jersey.

and other early federal petitions,[87] Evans's petition sought protection for multiple machines, in his case described collectively as an "improve–ment in manufacturing wheat into flour."[88] How much detail the petition contained is not clear, but the few surviving petitions from this period were relatively brief and largely devoted to impressing on the board the value (rather than the novelty or technical details) of the invention.[89] At least one of them, an unsuccessful petition by Evans himself for a steam-carriage patent in 1792, contained only a single paragraph of description.[90] In any event, Evans was expected subsequently to appear in support of his flour-milling claim, as he had done before the state legislative committees. In June 1790, he appeared before the board and "was requested to prepare drawings of his machines and when ready to give information."[91]

The signed and sealed patents emerging from this process were no more informative. Surviving patents from the 1790 regime adopt a one-paragraph format, naming the inventor and providing only a summary description.[92] To be sure, the statute required that a patentee file an enabling specification with the Secretary of State at the time the patent was granted, and the board eventually began to insist that "specification[s], . . . drafts or models" form part of the application.[93] But in Evans's case, those formalities seem to have broken down. Historical accounts have sometimes assumed that the patent received by Evans in January 1791[94]—the third federal patent issued—was the same as that allowed to him by Act of Congress in 1808, the so-called "Act for the Relief of Oliver Evans"[95] that granted him a new fourteen-

87. WALTERSCHEID, *supra* note 84, at 176–77.

88. The register of petitions records Evans's subject matter as "an improvement in manufacturing wheat into flour, called 'the art of elevating wheat and meal from the lower to the upper stories, and of conveying it from any one part to another of the mill, and of spreading the meal to cool, and gathering it again, and of attending the boulting hopper, all without the aid of manual labor.'" WALTERSCHEID, *supra* note 84, at 176.

89. *See* BRACHA, OWNING IDEAS, *supra* note 47, at 196–98.

90. *See* Petition from Oliver Evans to the Patent Board, [ca. 1 Dec. 1792], *reprinted in* 24 THE PAPERS OF THOMAS JEFFERSON 683–84 (John Catanzariti ed., 1990).

91. WALTERSCHEID, *supra* note 84, at 179.

92. WALTERSCHEID, *supra* note 84, at 181–82.

93. Patent Act of 1790, ch. 7, § 2, 1 Stat. 109, 110–11; WALTERSCHEID, *supra* note 84, at 180–81.

94. The patent was granted on December 18, 1790 but received by Evans only on January 7, 1791. P.J. Federico, *The Patent Trials of Oliver Evans: Part I*, 27 J. PAT. OFF. SOC'Y 586, 589–90 (1945).

95. Act for the Relief of Oliver Evans, ch. 13, 6 Stat. 70, 70–71 (1808).

year term three years after his first expired. But that assumption seems unsafe.[96]

The best evidence we have of Evans's documentary patent record may be a judicial decision that was not rendered until after the 1790 patent expired.[97] It depicts a rather slapdash process. The petition and specification did not match up with the issued patent, which included "the elevators, and other parts of the mill machinery, except, that the use of the hopperboy is incidentally mentioned; without any description of its use, and the manner in which it is to work."[98] Worse still, the only mention of the hopperboy in the patent was interlined, as though added after the fact. And the patent itself had not been recorded, despite delivery to Evans.[99] Looking back even from the first decade of the nineteenth century, Evans's federal grant seemed inadequate and irregular—a patent of the *ancien regime*.

II. PATRONAGE, PROPERTY, AND POLITICS

The acquisition of a federal patent was Evans's first contact with Thomas Jefferson, who as Secretary of State and a member of the patent board oversaw his successful petition and signed his patent.[100] Within a year, Evans was building a mill for the patent's other signatory, President George Washington.[101] Proximity to federal gov–ernment patronage was the recurring theme of Evans's life as a patentee, for both better and worse.

During the first two decades of the nineteenth century, Evans's milling patent was before Congress, the courts, and the public more than any other. Along with Evans's self-appointed role as the advocate of inventors, this meant that discussion of patents in the political sphere revolved substantially around Oliver Evans and his works. Evans and his opponents generated a stream of assertions about the nature of patent rights, cycling through different theories of desert, property, and social utility as they did so.

96. Pursuant to the Act, Evans submitted a new petition for a patent to the Secretary of State in conformity with the Patent Act of 1793, attaching a fresh specification at that time and not simply incorporating by reference his 1790 grant. *See id.* at 70. (authorizing a patent "to be made out in the manner prescribed by" the later Patent Act); Evans v. Eaton, 16 U.S. 454, 508–09 (1818).

97. *See* Evans v. Chambers, 8 F. Cas. 837 (C.C.D. Pa. 1807) (No. 4,555).

98. *Id.* at 838.

99. *See id.* at 837.

100. BATHE & BATHE, *supra* note 1, at 25.

101. *See id.* at 25–27.

A. Inventor and Author

There was truth to Evans's later claims that his initial patent term did not reward him. For Evans, the 1790s were a struggle to promote his mill inventions. The early 1800s saw his technology gain momentum, only for enforcement of the patent to fail.

For all that he was later criticized as a monopolist, Evans was a frantic disseminator of his invention. He claimed years afterward that he and his agents had travelled "thousands" of miles promoting his mill machinery.[102] Their efforts were not entirely futile. By one estimate, more than a hundred mills had adopted his machines by 1792.[103] Even so, the opposition of the Brandywine millers delayed uptake by others and was a subject of bitter resentment by the inventor.[104]

Evans's response was to scale up promotion by another route: the publication of a book outlining his inventions alongside some basic principles of mill engineering. This work, *The Young Mill-Wright and Miller's Guide*, would far outlive Evans and his patents. First published in 1795, it continued to appear in subsequent editions until 1860, and was long considered a standard engineering reference work.[105] It is worth appreciating that Evans was able to publicize the design of his invention aggressively because he possessed a patent for it: freed from the need to hold his know-how close, he made the book the centerpiece of a proselytizing strategy.[106] But this was not an immediately rewarding path. Evans the author was consumed by his writing in the mid-1790s, to the exclusion of other business. The book grew uncontrollably in density and detail, gradually reducing Evans to such financial precarity that his wife Sarah had to sell the cloth she had spun for their children's clothing in order to buy bread.[107] An appeal to the Pennsylvania legislature for a subsidy (Evans had relocated to Philadelphia in 1792) was in vain, and only rescue by a wealthy benefactor allowed the book to reach publication.[108]

After these thin years, Evans's prospects began to improve. His patent licensing operation was extensive enough that his agents used a

102. ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 34–34.

103. *See* FERGUSON, *supra* note 11, at 29.

104. ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 34–35.

105. BATHE & BATHE, *supra* note 1, at 47.

106. *See* OLIVER EVANS, ADDRESS OF THE ADVOCATE OF THE PATENTEES, INVENTORS OF USEFUL IMPROVEMENTS IN THE ARTS AND SCIENCES 12 (Washington City, Duane & Son 1806) [hereinafter EVANS, USEFUL IMPROVEMENTS].

107. *See* EVANS, *supra* note 20, at 16.

108. BATHE & BATHE, *supra* note 1, at 45–47.

standard printed form to record licenses.[109] Although he often complained that revenues barely covered the cost of collection, Evans eventually made "small clear proceeds" on his milling patent, which he ploughed back into his work in steam engineering.[110]

It was not lost on the perpetually disappointed Evans that his rights started to turn a profit just as his patent term approached its end. As its fourteen-year term expired, Evans adopted two strategies to prolong the reward. One was litigation. Evans did not engage in much if any infringement litigation during the 1790s.[111] But beginning in 1804, Evans initiated a wave of suits in the U.S. Circuit Court (then a trial court) in Philadelphia: the first against Benjamin Chambers, a miller from Western Pennsylvania, followed by at least eleven more in 1805.[112] The Chambers case would not be decided until 1807, at which point it would both kill off the Evans patent and inadvertently cause it to rise, phoenix-like, from the flames. In the meantime, Evans pursued a second goal: the extension of the patent by Congress.

Evans now entered the phase of his public career that was dominated by patent lobbying. As an inventor and businessman, his concerns were focused on steam engineering, and he thought of the revenues from the milling patent principally as a source of funding for his steam experiments. It was in these terms that he first attempted to interest Congress in a patent extension. Over the next two years, though, as his frustration with Congress grew, Evans developed a range of arguments for his own interest and that of inventors and patentees generally.

B. Justifying Patents: Right, Reward, and Relief

Histories of the early American patent system tend to describe the available theories of the patent during this period in a binary way. Patents were either utilitarian tools granted to encourage invention, or they were based on the natural right of the inventor to the fruits of his labor. Most accounts are comfortable saying that these conceptions of the patent were complementary and coexistent, which is true. But the arguments of Evans and others show a greater diversity of justifications—some of which resist or escape the binary framing—and the ways in which they were addressed to different audiences.

109. *Id.* at 160 app. plate 31.

110. EVANS, USEFUL IMPROVEMENTS, *supra* note 106, at 12.

111. The grounds and fate of an isolated 1795 suit filed against James Sterret, a mill owner from Erie County, are not known. *See* National Archives, *Law and Appellate Records of the U.S. Circuit Court for the Eastern District of Pennsylvania, 1790–1847*, Microfilm Publication M969 (listing among the archived case files *Oliver Evans v. James Sterret et al.*, October Term 1795).

112. *Id.*

Roughly speaking, there were four frames for justifying the inventor's right. One was a purely incentive-based or consequentialist argument, in which the purpose and benefits of the patent system were expressed solely in terms of mobilizing inventive efforts for the ends of social welfare. The text of the 1790 Patent Act provided perhaps the sparest statement of these ends: the Act's one substantive charge to the eminences of the patent board was to grant a patent "if they shall deem the invention or discovery sufficiently useful and important."[113]

An alternative (though not necessarily mutually exclusive) framing took the form of arguments from "natural justice" or "mental property," which adopted the theory from common law copyright and the literary property debates that the creator possessed a natural property right in the fruits of his mental labor. These ideas too were present at the creation, with South Carolina's state patent law, the only general patent provision enacted by a state before the Constitution, recognizing the natural justice of the inventor's cause, and some early advocates for patentees in the 1790s advancing arguments from mental property.[114]

In between these two perspectives were two other justifications for granting or strengthening the patent privilege. One was a compensatory or reward theory, in which inventors were to be rewarded after the fact for their costs and efforts, based on their service to the public. This was not a purely utility-maximizing argument directed to the generation of further inventions (or the "promotion of progress in the useful arts"), in that it focused intensely on the desert of the inventor—the private reward rather than the public good. At the same time, it was not inherently an argument from natural right or mental property, since it was entirely compatible with the grant being a discretionary one; not an entitlement but something more like a bounty, a gratuity, or a debt. This was the tenor of most of the pre-1790 state patents: Oliver Evans's grants, after all, spoke of "adequate compensation . . . for his ingenuity, trouble and expense,"[115] and the same concept continued into the first federal regime.

The compensatory view of patents may seem, to us, strangely retrospective. The modern incentive theory of patents sees the social benefit of patent protection as prospective and dynamic: people will incur the costs of time and money necessary for invention because they expect to be able to appropriate a return on the invention. From society's point of view, granting an exclusive right to inventions already made is simply the cost of doing business—a means to the end of future innovation, rather than a social obligation to the past inventor per se.

113. Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 110.

114. Bracha, *Geniuses and Owners*, *supra* note 44, at 375–77.

115. *See, e.g.*, Evans Pennsylvania Patent, *supra* note 27, at 484; *see also supra* notes 27–30 and accompanying text.

By contrast, the compensatory view of Evans's time focused very much on what the inventor was owed by the community. In doing so, it fit more than one logic of the early Republic. First, it carried the note of duty or obligation in what was still fundamentally an honor culture.[116] Pennsylvania state patents had described the grant in exactly those terms, calling it "consistent with the honor of this state to reward the inventors of useful improvements."[117] Second, it fit the governing institutions of a polity that compensated many providers of public services on a bounty basis.[118] Naval officers and privateers took prizes and received bounties for capture; law officers were paid for arrests. Pensions for service in the Revolutionary War were a central topic of federal petitioning in the early Republic.[119] After-the-fact compensation for efforts mobilized to the public good was a basic and pragmatic tool of American government well into the nineteenth century.

The final frame, of which Oliver Evans became the supreme practitioner, was the argument for relief. In this view, inventors were an oppressed, victimized, and downtrodden class crying out for public aid. Again, this appeal fit a core category of governmental activity in the early Republic. Congress granted debt relief and tax remission, aid to those affected by natural disasters, and relief to the victims of maladministration.[120] The constant stream of petitions to Congress for

116. *See, e.g.*, JOANNE B. FREEMAN, AFFAIRS OF HONOR: NATIONAL POLITICS IN THE NEW REPUBLIC, at xxi–xxii (2001) (discussing motivations of early American politics through an honor culture framework).

117. An Act [for] Granting unto George Wall, Junior, the Sole and Exclusive Privilege of Making and Vending a Mathematical Instrument by Him Invented for the Term of Twenty-One Years, *in* 12 THE STATUTES AT LARGE OF PENNSYLVANIA FROM 1682 TO 1801, at 495 (1906); *see also* An Act to Grant to Arthur Donaldson, His Executors, Administrators and Assigns, the Exclusive Right of Making and Using in the River Delaware a Machine Called Hippopotamos by Him Invented, for the Cleansing of Docks and Raising Sand, Gravel, Dirt and Other Things from the Bed of the River, *in* 12 THE STATUTES AT LARGE OF PENNSYLVANIA FROM 1682 TO 1801, at 411–12 (1906) ("And whereas it is consistent with the honor of this state to reward the inventors of useful machines and the most rational and just mode of such reward is and ought to be the exclusive advantage resulting from the invention for a term of years[.]").

118. *See* NICHOLAS R. PARRILLO, AGAINST THE PROFIT MOTIVE: THE SALARY REVOLUTION IN AMERICAN GOVERNMENT, 1780–1940, at 3 (2013) ("[B]ounties, ever since the Middle Ages, had held great promise as instruments to vindicate the directives of the sovereign . . . .") (describing the nineteenth-century transition of American government from profit-seeking to salaried officers).

119. *Id.* at 1, 145–46.

120. *See* MICHELE LANDIS DAUBER, THE SYMPATHETIC STATE: DISASTER RELIEF AND THE ORIGINS OF THE AMERICAN WELFARE STATE, 17–18 (2013); JERRY L. MASHAW, CREATING THE ADMINISTRATIVE CONSTI–

relief via private acts had lists of signatories ranging from one to thousands.[121] As with each of the other justifications for support of inventors' rights, the relief argument blended easily with other principles. The wrong done to inventors, for example, might be the misappropriation of their mental property (a natural rights emphasis), or it might be their monetary loss on their experimental efforts (a compensatory rationale). All the same, the relief framing represented a distinct type of claim on government.

Evans's first petition to Congress for an extension of the milling patent was thoroughly prospective and consequentialist. According to the report of the House Committee to which it was referred, Evans sought an extension "with a view that he may appropriate the proceeds towards completing his further inventions on steam engines."[122] The committee considered that "if he could be encouraged to persevere, it is highly probable his discoveries may be rendered useful to his country, and at the same time profitable, and honorable to himself."[123] Evans was optimistic about his extension, and wrote to Thomas Jefferson, now President, to affirm that an additional term would support his "expensive experiments in persuit [sic] of other useful improvements."[124] The committee's report recommended drafting legislation to allow patent and copyright extensions generally,[125] but Congress did not pursue the idea.

Evans petitioned again a year later, in December 1805, and this petition was again coldly transactional.[126] In dispassionately relating the limited returns under his 1790 patent, Evans noted that "he has already expended more than the nett [sic] profits arising from his invention" in spending $3,700 on steam engine research.[127] After gesturing towards his "sanguine expectations" of labor savings worth 100,000 men, Evans gave an itemized budget for spending the anticipated returns on an extended patent term: $3,000 each for introducing steam engines, for further experiments, and for publishing a "Young Steam Engineer's

---

TUTION: THE LOST ONE HUNDRED YEARS OF AMERICAN ADMINISTRATIVE LAW 122 (2012).

121. *See* McKinley, *supra* note 83, at 1562 n.106 (citing 8 DOCUMENTARY HISTORY OF THE FIRST FEDERAL CONGRESS OF THE UNITED STATES OF AMERICA, 4 MARCH 1789–3 MARCH 1791, at xix–xx (Kenneth R. Bowling et al. eds., 1998)).

122. OLIVER EVANS, H.R. MISC. DOC. NO. 8-128, at 1002–03 (2d Sess. 1805).

123. *Id.*

124. BATHE & BATHE, *supra* note 1, at 160 app. plate 31.

125. OLIVER EVANS, H.R. MISC. DOC. NO. 8-128, at 1002–03 (2d Sess. 1805).

126. APPLICATION OF OLIVER EVANS FOR AN EXTENSION OF HIS PATENT, H.R. MISC. DOC. NO. 9-196 (1st Sess. 1805).

127. *Id.*

Guide."[128] He concluded with the explicit quid pro quo: "your petitioner, on his part, promises faithfully to exert his abilities to bring to perfection and into use his said improvements."[129] Again, Congress failed to act.

When Evans returned to his cause for a third time late in 1806, his tone and his arguments were very different. He now came not for himself alone, but in concert with other inventors and patentees who had petitioned Congress for longer patent terms. Now his arguments were addressed more sharply to the needs of inventors as a class. On December 13, Evans wrote to President Jefferson that he was making his "last effort to draw the attention of the legislature . . . to the oppressed and aggrieved state of the men of inventive genius of this country who are generally made so poor by their pursuits," and whose patents were so short-lived that they left inventors "in poverty and distress."[130] Reminding the President "that genius produces science and art, science and art produce agriculture, manufactures and commerce," Evans described his advocacy for inventors in overheated terms: "not only the wealth and power of the nation but the happiness of millions yet unborn yes the very existence of millions depend on my success or on the measures to be adopted by Congress."[131]

One week later, Evans appeared before a congressional committee empaneled to consider the patent term. He presented himself on behalf of "the patentees, inventors of useful improvements, who have petitioned Congress for redress of grievances . . . in defence of mental property."[132] In this vivid speech, quickly published for wider circ–ulation, Evans declared that:

> Men of genius, in this country, are of all others least protected; they are slighted, embarrassed, and abused . . . .
>
> . . . [W]e are at the mercy of the rest of the community—an enslaved, oppressed, dependant [sic] class, amidst a free, enlightened, and independant [sic] people; held dependant on the will of the legislature of the nation, for the privilege of enjoying exclusively the fruits of our own labors . . . .[133]

In a departure of both style and substance from his past congressional pleas, Evans now embraced the natural-right conception

128. *Id.*

129. *Id.*

130. Letter from Oliver Evans to Thomas Jefferson (Dec. 13, 1806), *reprinted in* Bathe & Bathe, *supra* note 1, at 127.

131. *Id.*

132. Evans, Useful Improvements, *supra* note 106, at 3.

133. *Id.* at 4.

of an inventor's mental property. He insisted "[t]hat men of genius are as justly entitled to protection . . . of the fruits of the labors of the mind . . . as any are in the possession of real or personal property."[134] His central objective in making this argument was—as it had been for the proponents of common law copyright in Britain's literary property debates—to argue for a perpetual term. Taking rhetorical aim at the framers of the Constitution, Evans demanded to know "What sort of right is this, which is entitled to be secured for a limited time only? . . . [W]hy not delegate to Congress the power to secure the right forever, to this, as well as any other property?"[135] If not a perpetual right, he suggested, then three generations or at least a fifty-year term would serve.[136] Finally, Evans built to a mighty climax on the benefits of perpetual patents to the nation. From the inventor thus secured,

> others catch the sacred flame, and engage in the same pursuit, with like success—genius, no longer held in contempt, is esteemed . . . persecution, abuse and robbery cease, because means of defence [sic] appear . . . .
>
> The tide of genius flowing over our happy country, turning dry and barren wastes into fruitful fields, and enlivened by the cheering sun, refreshing rains, and gentle zephyrs of possession and enjoyment of rights, would bring forth flowers and fruits of useful discoveries and improvements in science and the arts, in abundance, which are now locked in embryo, by the cold north winds of disappointment, poverty, and despair.[137]

As before, Evans's lobbying fell on deaf ears. It may not have consoled him that a patentee interest began to emerge and organize in his wake. In 1807, Benjamin Dearborn, a fellow state-turned-federal patentee, founded the Newengland Association of Inventors and Patrons of Useful Arts, which during its short existence similarly extolled the inventor of genius.[138]

By that time, though, Evans was grappling with one more setback of his own. The belated test case on Evans's patent, *Evans v. Chambers*, finally came to a head in 1807.[139] At argument in the U.S. Circuit Court

134. *Id.* at 16.

135. *Id.* at 9.

136. *See id.* at 10.

137. *Id.* at 14–15.

138. *See, e.g.*, Remarks on the Rights of Inventors, and the Influence of Their Studies in Promoting the Enjoyments of Life, and Public Prosperity (Boston, E. Lincoln 1807) (discussing the burdens of inventors and their unfair treatment under the law and in society).

139. 8 F. Cas. 837 (C.C.D. Pa. 1807) (No. 4,555).

in Philadelphia, Evans suffered a nasty reversal of fortune before Supreme Court Justice Bushrod Washington and District Judge Richard Peters. Defendant's counsel challenged the validity of the 1790 patent based on formalities—among other things, the failure of the patent document itself to include the hopperboy recited in the petition.[140] Evans's counsel protested vehemently in open court, but privately advised Evans that they should find a way to stall the case lest the judges invalidate the grant.[141]

Evans immediately wrote to Thomas Jefferson in distress, fretting that invalidity would subject him to suit from all the licensees from whom he had taken money, "which would [lead] to my utter ruin."[142] The President wrote back to assure him that if the "high officers" of the patent board—of which Jefferson had been one at the time—had failed to ensure the patent complied with the statute, "their negligence cannot invalidate the inventor's right who has been guilty of no fault."[143] But it was too late: Justice Washington deemed the objection "not to be gotten over."[144]

Ironically, Washington's nullification of the expired patent accomplished what all Evans's lobbying could not: a legislative restoration of the grant. With support from Jefferson, and with a letter from Secretary of State James Madison "stating his unwillingness to accept the decision of the Circuit Court,"[145] Evans petitioned Congress once more. The resulting "Act for the Relief of Oliver Evans" allowed Evans to seek, and the Secretary of State to grant, a patent for his invention for an additional fourteen-year term beginning in 1808.[146] Now Evans held a patent that was good until 1822, and he would test the patent law as it had not been tested before.

140. *Id.* at 838.

141. *See* Letter from Oliver Evans to Thomas Jefferson (Apr. 18, 1807) (on file with National Archives), https://founders.archives.gov/documents/Jefferson/99-01-02-5472 [https://perma.cc/P3Z4-LL5S] ("Mr [sic] Rawle advised me as a prudent step to consent that he should propose the opposite counsel to withdraw a Juror and let the cause lay over untill [sic] the next term stating that he was apprehensive that the court would decide against the validity of the patent . . . .").

142. *Id.*

143. Letter from Thomas Jefferson to Oliver Evans (May 2, 1807) (on file with National Archives), https://founders.archives.gov/documents/Jefferson/99-01-02-5538 [https://perma.cc/7K7Z-JRLA].

144. *Chambers*, 8 F. Cas. at 838.

145. BATHE & BATHE, *supra* note 1, at 132.

146. Act for the Relief of Oliver Evans, ch. 13, 6 Stat. 70 (Jan. 21, 1808).

III. MARSHALL, JEFFERSON, AND THE PROPERTY QUESTION

In October of 1808, a merchant named John Moody called at Jefferson's Virginia plantations. Jefferson was away in the capital and the current occupants of his mill could give Moody no information, so Moody wrote the first patent demand letter to a sitting President of the United States.[147] As agent of Oliver Evans, he explained, he had been employed "to Settle his Business with The Millars. Respecting thier useing his Improovements for Manufacturg flour without a Licence."[148] Jefferson could rightly consider himself a benefactor of Evans, having signed the act to extend Evans's patent nine months earlier. What's more, Jefferson did not believe himself liable, because his mill had been built after the original patent expired in 1804 and before the 1808 renewal. But if the President's feathers were ruffled, he did not show it. Jefferson agreed to pay the requested license fee "willingly as a voluntary tribute to a person whose talents are constantly employed in endeavors to be useful to mankind, and not as a legal obligation."[149]

Far from ending Evans's political struggles, the extension of his patent heightened the stakes and the controversy surrounding his rights. First, Evans announced his intention to increase license fees dramatically.[150] This act aroused the collective ire of the millers, creating a powerful lobby against the patent. Second, Congress's resurrection of the expired patent raised a thorny question about all the millowners who, like Jefferson, had adopted Evans's system after the end of his original term. The act had included a proviso explicitly barring liability for any person "who shall have used the said improvements, or have erected the same for use, before the issuing of the said [second] patent."[151] But did that merely cover activity in the

147. Letter from John Moody to Thomas Jefferson (Oct. 20, 1808) (on file with National Archives).

148. *Id.*

149. Letter from Thomas Jefferson to John Moody (Oct. 26, 1808) (on file with National Archives), https://founders.archives.gov/documents/Jefferson/99-01-02-8907 [https://perma.cc/VFK4-N3WK].

150. Letter from Oliver Evans for all the Newspapers in the United States (Apr. 20, 1810), *reprinted in* BATHE & BATHE, *supra* note 1, at 167–68; *see also* EVANS, OLIVER EVANS TO HIS COUNSEL, *supra* note 20, at 30–32 (discussing the value of licensing his patents).

151. Act for the Relief of Oliver Evans, ch. 13, 6 Stat. 70, 71 (Jan. 21, 1808) ("*Provided*, That no person who may have heretofore paid the said Oliver Evans for license to use his said improvements shall be obliged to renew said license, or be subject to damages for not renewing the same: *And provided also*, That no person who shall have used the said improvements, or have erected the same for use, before the issuing of the said patent, shall be liable to damages therefor.").

gap between the first and second terms, or did it permanently exempt all mills built during that period?

These two sources of vexation in turn produced a split between Founding Fathers over the nature of property in invention. In the courts, Chief Justice John Marshall rendered the principal judicial opinion now cited as support for a propertarian conception of patents in the early Republic.[152] At the same time, in the public sphere, former President Thomas Jefferson penned what is now the most famous pronouncement against the natural-property vision of patents: his 1813 letter to the Baltimore miller Isaac McPherson.[153] Neither is quite what it seems.

A. Marshall and the Inchoate Right

What was the nature of an inventor's right in his invention? Did it depend on the existence of a patent, or did it precede the grant of legal exclusivity? How did it relate to the rights of the public? All these questions were forced to the forefront by the unusual circumstances of Evans's renewed patent. Many alleged infringers had (or claimed they had) set up their mills in the period between his first and second grants. When sued, these defendants argued that the Act for the Relief of Oliver Evans was an unconstitutional ex post facto law, exposing them to liability on investments made before its passage.[154] Evans's lawyers responded that what really mattered was not the date of the patent, but the date of invention: the inventor's rights, while perfected and given the protection of positive law by the patent of 1808, nevertheless stemmed from his act of invention itself, and thus preceded the defendant's activities, even for mills set up before the patent.[155] It was a short hop from that argument to a contention that inventors in general possessed a pre-patent right.

The first part of this move is demonstrated by *Evans v. Weiss*, the first case applying Evans's rights to a mill built before the 1808

152. Evans v. Jordan, 8 F. Cas. 872 (C.C.D. Va. 1813) (No. 4,564). *See* Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context*, 92 CORNELL L. REV. 953, 995 (2007) [hereinafter Mossoff, *Who Cares*]; Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365, 1384 (2018).

153. *See* Mossoff, *Who Cares*, *supra* note 152, at 960–67 (relating the elevation of Jefferson's letter by scholars and the courts); Jeremy N. Sheff, *Jefferson's Taper*, 73 SMU L. REV. 299, 301 (2020) (referring to the letter as "part of the fundamental lore of American intellectual property (IP) law").

154. *See, e.g.*, *Jordan*, 8 F. Cas. at 873 (reporting suit from Evans after defendants begin manufacturing machinery covered by Evans's expired patent before he had received the extension); Evans v. Weiss, 8 F. Cas. 888, 889 (C.C.D. Pa. 1809) (No. 4,572) (bringing suit after defendants produced Evan's machinery during a time where the patent was expired).

155. *Weiss*, 8 F. Cas. at 889.

patent.[156] Justice Bushrod Washington, presiding in the Circuit Court in Philadelphia, rejected the ex post facto argument "because the general [patent] law declares, beforehand, that the right to the patent belongs to him who is the first inventor, even before the patent is granted."[157] Any person who constructed a machine invented by another thus assumed the risk that the earlier inventor would obtain a patent and "cut him out of the use of the machine thus erected."[158] Washington's opinion was, in essence, a restatement of the first-to-invent patent regime: that the first inventor, and only he, had the right to obtain a patent on the device in question.

Chief Justice John Marshall expanded on the point in *Evans v. Jordan*, decided in the U.S. Circuit Court of Virginia in June 1813.[159] Describing the first inventor's exclusive right to obtain a patent, Marshall proclaimed:

> The constitution and law, taken together, give to the inventor, from the moment of invention, an inchoate property therein, which is completed by suing out a patent. This inchoate right is exclusive. It can be invaded or impaired by no person. No person can, without the consent of the inventor, acquire a property in the invention. Whenever, then, previous to a patent, any person constructs a machine discovered by another, he constructs it subject to the right of that other.[160]

Marshall proceeded to explain why this prevented him from construing the Act for the Relief of Oliver Evans as an ex post facto law. Like any first inventor, Evans had gained an "inchoate and indefeasible property in the thing discovered [which] commences with the discovery itself, and is only perfected by the patent."[161] Thus Congress in granting that patent was not retroactively invading "sacred rights of property"—meaning the property rights of those who had built the machine before the grant.[162] The statute's proviso protected only activities taking place before the grant of the renewed patent, and the "plain meaning" of the act did not need to be twisted to give mills built during that period a permanent exemption.[163]

156. *Id.*

157. *Id.*

158. *Id.* at 889–90.

159. *Jordan*, 8 F. Cas. at 872.

160. *Id.* at 873.

161. *Id.*

162. *Id.*

163. *Id.*

It is important to note that, when Marshall wrote of the inventor's "inchoate and indefeasible property," he did not associate it with Oliver Evans's oft-made claim that the patent protected an inventor's natural right in his labor. The property outlined by Marshall was a right of priority, exclusively capable of ripening into a patent—it arose with the invention, but did so by virtue of first possession, not genius; it derived from "the constitution and law," not natural right.[164]

The other little-known feature of Marshall's opinion in *Evans v. Jordan* is that half the court disagreed. The U.S. Circuit Court was a two-judge affair, with Marshall sitting alongside U.S. District Judge St. George Tucker.[165] Tucker, the author/editor of the leading American legal treatise (Tucker's edition of *Blackstone's Commentaries*), was scarcely less of an authority than Marshall.[166] He wrote no published dissent in *Evans v. Jordan*, but certified the division of opinion—sending the case by right to the U.S. Supreme Court[167]—and prepared a memorandum opinion that survives in Marshall's papers.[168]

Tucker saw the matter not in terms of the inventor's pre-patent property, but of the public's post-patent right. "In Conference with Judge Marshall," he wrote:

> I made the following Observations to him.
>
> The Objects of the C[onstitution of the] U[nited] S[tates] & of the Patent Laws, is two fold.
>
> 1. To secure to Inventors, &c the Benefit of their Inventions.
>
> 2. To *procure* for the Citizens of the U:S: the *full Knowledge*, and *Benefit* of those Inventions *after the Expiration* of the period for which the patent is granted.

164. *Id.*

165. *Id.* at 872.

166. *See* Davison M. Douglas, *Foreword: The Legacy of St. George Tucker*, 47 WM. & MARY L. REV. 1111, 1112 (2006) ("Tucker was the most significant legal scholar of the early nineteenth century, particularly after publication of his five-volume edition of William Blackstone's *Commentaries on the Laws of England* in 1803.").

167. *See* Jonathan R. Nash & Michael G. Collins, *The Certificate of Division and the Early Supreme Court*, 94 S. CAL. L. REV. (forthcoming 2021) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3532666 [https://perma.cc/6UBJ-TQ7N].

168. Memorandum from St. George Tucker on *Evans v. Jordan and Morehead*, (c. June 7, 1813), *in* THE PAPERS OF JOHN MARSHALL DIGITAL EDITION (Charles Hobson ed.), https://rotunda.upress.virginia.edu/founders/default.xqy?keys=JNML-chron-1810-1813-06-07-2 [https://perma.cc/H3L2-4WTC].

. . . .

> . . . The moment it expired the second Object of the Law *became a matter of Right*, to every Citizen of the U:States.[169]

In Tucker's view, allowing Evans's patent to operate against machines built before 1808 "would have the effect of an *Ex post facto* Law . . . And, to punish a Man for exercising a Right legally acquired, would be a Violation of *common Right*, which is also contrary to the Spirit of the C[onstitution of the] U[nited] States."[170]

B. Jefferson and the Baltimore Millers

Even as judges took divergent positions on the balance between private property and public right, the opponents of Evans's patent were making their case in the political realm. By far the most powerful and organized group resisting Evans were the millers of Baltimore, led by the wealthy Quaker families, the Tysons and the Ellicotts.[171] After losing a test case against the renewed patent,[172] the Baltimore millers became the inventor's principal antagonists in Congress and in the press. By the beginning of 1813, they were petitioning Congress to reconsider its decision "to let Mr. Evans loose upon the community with so grievous, so despotic a power."[173]

The greatest coup scored by the Baltimore millers was the enlistment of Thomas Jefferson to their cause. In August 1813, one of their number, Isaac McPherson, wrote to Jefferson in search of prior art in the library of Monticello: "I am told that thou hast in thy possession a Book of an old date that has the plates of the screw and elevator at work in a mill . . . ."[174] Jefferson responded with a lengthy letter assailing Evans's patent on several fronts. Like Judge Tucker had done in *Evans v. Jordan* two months earlier,[175] Jefferson sympathized with the accused infringers' ex post facto argument. The renewal act, he thought, was intended to exempt those who built mills before the restoration of the patent, and should have been construed as such,

169. *Id.*

170. *Id.*

171. Evans v. Robinson, 8 F. Cas. 886, 886 (C.C.D. Md. 1813) (No. 4,571).

172. *Id.* at 886–88.

173. Memorial of William Cole and others to Congress (Jan. 1, 1813), *reprinted in* APPLICATION TO AMEND THE ACT CONTINUING CERTAIN PATENT RIGHTS TO OLIVER EVANS, H.R. MISC. DOC. NO. 13-354, at 224–25 (2d Sess. 1814).

174. Letter from Isaac McPherson to Thomas Jefferson (Aug. 3, 1813), *in* 6 THE PAPERS OF THOMAS JEFFERSON 353–54 (J. Jefferson Looney et al. eds., 2009).

175. *See* Memorandum from St. George Tucker, *supra* note 168.

especially given the retroactive alternative "being contrary to natural right."[176]

Furthermore, Jefferson continued, Evans's pretended inventions were not new. Here Jefferson unleashed his library in full, citing earlier uses of the bucket elevator and screw conveyer in a long list of classical and modern texts.[177] He conceded only that the "Hopper-boy is an [sic] useful machine; &, as far as I know, original."[178]

Famously, Jefferson then elaborated on the question of patent property. He rejected the claim "by some (and in England especially) that inventors have a natural and exclusive right to their inventions."[179] This contention was by now the stock-in-trade of Evans's lobbying for his own patent extensions and the rights of inventors generally.[180] Echoing arguments familiar from the eighteenth-century British literary property debates,[181] Jefferson pointed to the disconnect between a natural property right and the fugitive and nonrivalrous nature of information:

176. Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* 6 THE PAPERS OF THOMAS JEFFERSON 379 (J. Jefferson Looney et al. eds., 2009). To be clear, Jefferson made this argument as a matter of statutory construction, not constitutionality: it was settled law by this time that the Ex Post Facto clause applied only to criminal law. *See* Calder v. Bull, 3 U.S. 386, 391–93 (1798). With the apparent exception of Judge Tucker, courts reviewing the Evans Act saw no reason to disturb that premise. *See, e.g.*, Evans v. Robinson, 8 F. Cas. at 888 ("[T]he act referred to is not an ex post facto law, for that relates to criminal cases only . . . .").

177. Letter from Thomas Jefferson to Isaac McPherson, *supra* note 176, at 380–82.

178. *Id.* at 382.

179. *Id.* It is not entirely clear to which English commentators Jefferson was referring. But with the War of 1812 ongoing, English ideas were presumably in bad odor.

180. *See, e.g.*, EVANS, USEFUL IMPROVEMENTS, *supra* note 106, at 6, 9 ("[T]he United States, was convinced of the good policy of rewarding men for making useful discoveries . . . by securing for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries."); ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 147 ("A patent is a protection of an *inherent right* for a limited time . . . .").

181. *See, e.g.*, Millar v. Taylor (1769), 4 Burr. 2303, 2363 (K.B.) (Yates, J., dissenting) ("But how can an author, after publishing his work, confine it to himself? If he had kept the manuscript from publication, he might have excluded all the world from participating with him, or knowing the sentiments it contained: but by publishing the work, the whole was laid open; every sentiment in it made public, for ever; and the author can never recall them to himself, never more confine them to himself, and keep them subject to his own dominion. . . . So, from the time of publication, the ideas become incapable of being any longer a subject of property: all mankind are equally intitled [sic] to read them; and every reader becomes as fully possessed of all the ideas, as the author himself ever was.").

> [I]t would be curious then if an idea, the fugitive fermentation of an individual brain, could, of natural right, be claimed in exclusive and stable property. [I]f nature has made any one thing less susceptible, than all others, of exclusive property, it is the action of the thinking power called an Idea; which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the reciever [sic] cannot dispossess himself of it . . . . [H]e who recieves an idea from me, recieves instruction himself, without lessening mine; as he who lights his taper at mine, recieves light without darkening me . . . . [I]nventions then cannot in nature be a subject of property. [S]ociety may give an exclusive right to the profits arising from them as an encouragement to men to pursue ideas which may produce utility.[182]

As Jeremy Sheff has argued, it would be a mistake (albeit an oft-made one) to see Jefferson's letter as a declaration that consequen–tialism alone underlay early American thinking about patents.[183] Jefferson's ideas about creation and ownership remained embedded in a worldview that privileged natural rights.[184] This much is evident in Jefferson's treatment of the Act for the Relief of Oliver Evans: he did not criticize it on grounds of utility—say, because it gave an unnecessary windfall to an inventor or constrained the development of the industry—but insisted that it should be treated as a law "abridging the natural rights of the citizen," in keeping with Americans' near-universal "sentiment that ex post facto laws are against natural right."[185] Like Judge Tucker in *Evans v. Jordan*, Jefferson saw the limited-time patent bargain as vesting rights in both the inventor and the public. And as with Evans's own fluid switching between welfarist and natural-rights arguments in pursuit of greater protection, Jefferson's letter to McPherson shows that the two frames were not mutually exclusive.

Jefferson's letter soon became the centerpiece of the Baltimore millers' ongoing attempts to repeal or modify Evans's act.[186] Their

182. Letter from Thomas Jefferson to Isaac McPherson, *supra* note 176, at 383.

183. *See* Sheff, *supra* note 153, at 303–06.

184. *Id.* at 305–06, 313 (arguing that Jefferson drew the metaphor of the taper from Cicero and that his views were accordingly grounded in a classical natural rights tradition).

185. *See* Letter from Thomas Jefferson to Isaac McPherson, *supra* note 176, at 379.

186. *See* Memorial to Congress of Sundry Citizens Praying Relief from the Oppressive Operation of Oliver Evans' Patent, NILES' WKLY. REG., Feb.

efforts made some headway in Congress. A Senate committee chaired by Maryland's Samuel Smith, a former mayor of Baltimore, reported in favor of a bill to amend the act, endorsing the millers' arguments that Evans's inventions were not new at the time of his original patent and that Evans had "abused the power vested in him" by the renewal.[187] But a House committee led by Representative Charles Ingersoll of Philadelphia—Evans's own base of operations—rejected the millers' memorial, observing that "[t]he patentee, by law, has an exclusive privilege to use his invention as he pleases. No person has a right to complain if the proprietor of an invention demands a sum deemed exorbitant, more than if such a demand had been made for any other species of property."[188]

For his part, Oliver Evans responded to the clash of 1813–14 by rising to his polemical peak. In the press, his pamphlet-length response to Jefferson's letter was entitled "A Trip Made by a Small Man in a Wrestle with a Very Great Man."[189] Jefferson, he argued, had the argument from natural law precisely backward: no private property in land or animals existed in the state of nature without an act of appropriation and possession, "[b]ut a man's ideas and inventions, are, by natural law, his own exclusive property; he need show no act to vest the property in him so long as he keeps them secret to himself."[190] Most of the tract was devoted to score-settling with various millers and telling his own sympathetic story, but Evans returned to his broader arguments about the patent system, recapitulating his theme of the suffering inventor and proposing that Congress adopt a twenty-eight-year patent term.[191]

Meanwhile, Evans pressed his own case again directly to Congress. "[I]n behalf of himself and the patentees in the United States" he pleaded for the relief of the oppressed class of inventors, "so few in number, that they are never represented in legislation," and subject "to

28, 1814 (Addenda to Vol. V), at 1 (enclosing as exhibit No. I the letter from Jefferson).

187. AMENDMENT PROPOSED TO THE ACT CONTINUING CERTAIN PATENT RIGHTS TO OLIVER EVANS, S. DOC. NO. 13-365, at 238 (2d Sess. 1814).

188. APPLICATION TO AMEND THE ACT CONTINUING CERTAIN PATENT RIGHTS TO OLIVER EVANS, H.R. MISC. DOC. NO. 13-354, at 224 (2d Sess. 1814).

189. Oliver Evans, Letter to the Editor, *A Trip Made by a Small Man in a Wrestle with a Very Great Man*, NILES' WKLY. REG., Feb. 28, 1814 (Second Addenda to Vol. V), at 1 (1814).

190. *Id.* at 1.

191. *Id.* at 12.

the frauds and jeers of knaves and wags, to deprivations and poverty."[192] Again the appeal to property as a guidestar was a principal theme. Any man who discovered a piece of "unlocated land" could seek a land patent, "and on paying the public for their right to the soil, it is secured to him, his heirs and assigns forever."[193] Furthermore, the landowner could invest in improving his land, "building mills, furnaces, forges, bridges, roads, canals, &c. for their own and the public benefit," all of which would be impossible if his term of ownership were only fourteen years.[194] Compared to a patentee of "easily found" land, an inventor was more deserving—but "we have heard no good reason assigned why protection to them should be extended to 14 years only, while all other classes are protected in the exclusive right to the fruits of their labor forever."[195]

As usual, Evans's arguments were not solely addressed to the inventor's private benefit. This time, he seized on current events and interwove his property analogies with a quite different proposition: a fiscal case designed to appeal to Congress at a time when the War of 1812 strained the federal government's resources and had forced the adoption of new direct taxes.[196] Evans fleshed out the idea in a further memorial to Congress, claiming rather optimistically that a combination of extended patent terms and royalties paid to the government would soon generate an explosion of invention and revenues "sufficient to free the people from taxation."[197]

The remaining piece in Evans's literary output of 1813–14 was one of the more extraordinary publications about the early-nineteenth-century patent system. On its face, *Patent Right Oppression Exposed; Or, Knavery Detected* was a vicious attack on Evans: it was subtitled "In An Address, to Unite All Good People to Obtain a Repeal of the Patent Laws" and dedicated "to the right, the honest millers throughout the United States."[198] In fact, the book was a work of epic sarcasm. Its centerpiece was an eighty-page poem, attributed to "Patrick N. I. Elisha, Esq., Poet Laureate," a pseudonym swiping at

192. Letter from Oliver Evans to the Honorable the Senators, and the Representatives in Congress, individually (Jan. 7, 1814), *reprinted in* NILES' WKLY. REG., Feb. 28, 1814 (Second Addenda to Vol. V), at 14 (1814).

193. *Id.* at 14.

194. *Id.* at 14.

195. *Id.* at 15.

196. *Id.* at 15.

197. Letter from Oliver Evans to the Congres [sic] of the United States, each honorable member individually (Feb. 5, 1814), *reprinted in* NAT'L INTELLIGENCER, Feb. 22, 1814, at 2095.

198. ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at A2.

the millers' ringleader, Elisha Tyson.[199] For page after page, the supp–osed poet complained about "the law of *patent-right* / Whose nature is to make friends fight,"[200] and damned Oliver Evans as an "avaricious, crazy-pated prig"[201] and "the most selfish varlet, / That e'er was born of any harlot."[202] Meanwhile Evans's own voice spoke from the footnotes, acidly pointing out the errors of the millers, telling the story of his own life and inventions, and rehashing his successful infringement litigation.[203] After a wild climax to the poem, in which Evans was depicted (by himself, remember) as a devilish imp cavorting with Satan, scantily-clad witches, and assorted hags who "show'd their shankies as they rompt,"[204] the volume turned into a collection of Evans's petitions, publications, and autobiographical sketches.

In addition to compiling many of the political and polemical arguments described above, these documents included an essay in which Evans did something few had attempted at that point: describe the principles of U.S. patent law.[205] American patent jurisprudence was still unformed. As of 1813, only a handful of patent cases had been reported (though more had been litigated), only one of them by the U.S. Supreme Court.[206] The first American patent treatise, published in 1810 by the New England lawyer and writer Thomas Green Fessenden, was based mostly on English cases.[207] Evans, while admitting that he was not learned in law, prepared his *Reflections on the Patent Law* as "useful information to inventors and patentees."[208] He wrote of the nature of novelty under the Patent Act,[209] of the scope of patents for "original discoveries" and follow-on inventions,[210] and of the definition of prior

199. *Id.* at unpaginated front material.

200. *Id.* at 4.

201. *Id.* at A2.

202. *Id.* at 17.

203. *Id.* at 2–9.

204. *Id.* at 78–81.

205. *Reflections on the Patent Law*, *in* ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 132, 132–48.

206. *See* WALTERSCHEID, *supra* note 84, at 362 & nn.26–30 (finding six reported patent decisions before 1810); Tyler v. Tuel, 10 U.S. (6 Cranch) 324 (1810). On unreported litigation, see Beauchamp, *supra* note 10, at 670.

207. THOMAS G. FESSENDEN, AN ESSAY ON THE LAW OF PATENTS FOR NEW INVENTIONS 42 (Boston, D. Mallory & Co. 1810).

208. ELISHA, PATENT RIGHT OPPRESSION, *supra* note 13, at 148.

209. *Id.* at 136–40.

210. *Id.* at 140.

art[211]—all subjects in which he had a rooting interest, but at the same time all genuinely fluid questions in early American patent law.

This would be a front on which Evans fought for the remainder of his life. Having gained and regained his rights through the executive and Congress, he now had to define and defend his patent in the courts just as they labored to work out the details of the law.

IV. OLIVER EVANS AND THE MAKING OF AMERICAN PATENT LAW

It is hard to overstate the scale, by early-nineteenth-century standards, of Evans's patent enforcement efforts in the 1810s. In an age when law and business were both intensely local, small-scale affairs, Evans had lawyers and agents on commission going county by county, mill by mill in multiple states, documenting use of his patented invention, charging license fees, and filing infringement suits. At a time when there were few suits in federal court at all and only a smattering of patent cases, Evans brought so many that he had to create a form complaint for his attorneys and instruct them not by private correspondence but by printed circular.[212]

The courts were forced to work through some basic conceptions and doctrines of patent law both in and by Evans's cases. Judges wrestled with practical issues of as-yet-unformed patent doctrine, including how strictly to apply the requirements of validity and how to understand the scope of Evans's rights at a time before patents contained formal claims. These problems also implicated the law's contested relationship to English patent jurisprudence and practice. Oliver Evans did not make the law to his liking—indeed, he died bitterly angry about how he had been treated by the courts, three years before the Supreme Court finally invalidated his rights[213]—but it was partly through his inventions that American patent law took shape.

A. Litigation Machine

Evans's patent assertion campaign rested on relentless enforcement. His agents in the 1810s were each instructed "to travel through a part of the United States, and to visit every flour mill."[214] In the summer of 1814, for example, Evans's brother Joseph traversed five New York

211. *Id.* at 141–44.

212. *See* Federico, *supra* note 94, at 673. *See generally*, EVANS, OLIVER EVANS TO HIS COUNSEL, *supra* note 20 (writing to his counsel to aid them in defense of his patent rights).

213. Federico, *supra* note 94, at 681; FERGUSON, *supra* note 11, at 53.

214. Deposition of Joseph Evans, Evans v. Masier, (C.C.S.D.N.Y. October 1816), on file at Law Case Files 1790–1846, National Archives at New York City.

counties in search of unlicensed users of Evans's machinery, ultimately demanding licenses from twenty-four millers in amounts ranging from $50 to $1,350.[215] By then, Joseph was one of at least seven regional agents operating in the mid-Atlantic states.[216] Yet the larger the effort to secure licenses, the more resistance Oliver Evans encountered. By 1817, he employed "fifteen of the most eminent counsel" to conduct litigation and found his own time "wholly engrossed by law suits."[217]

The total number of suits filed by Evans in the 1810s is unknown, stashed away in the dockets and files of individual federal courts.[218] A few visible parts of the campaign suggest litigation on a large scale: indices of court archives show more than 200 suits filed in Virginia between 1811 and 1823;[219] more than thirty in Philadelphia;[220] and another twenty-nine in the Southern District of New York,[221] to name but a few of the jurisdictions in which Evans was active. Repeat litigation against hundreds of individual defendants was a feature of the nineteenth-century patent system.[222] But the practice did not generally emerge until the 1830s;[223] Evans anticipated this development by decades.

An enforcement campaign of this scale required organization. Unlike in steam engineering, where he both patented his inventions and established a leading manufacturing works,[224] Evans was always a "non-practicing" patentee when it came to the milling patent. His network of agents had a dual mandate to enforce his patent and to promote (though not construct) his technology, demanding licenses where they

215. *Id.*

216. *See* Letter from Oliver Evans to the Millers of the United States (Dec. 30, 1809), https://www.loc.gov/resource/rbpe.1510150b/?sp=1 [https://perma.cc/4RHP-7EC9] (naming regional agents).

217. EVANS, OLIVER EVANS TO HIS COUNSEL, *supra* note 20, at 46.

218. These sources could be consulted in normal times, but at the time of writing are inaccessible due to the COVID-19 pandemic.

219. 7 THE PAPERS OF JOHN MARSHALL: APRIL 1807–DECEMBER 1813, at 404 (Charles F. Hobson et al. eds., 1993) (citing U.S. Circuit Court for Virginia, Index to Ended Cases 1790–1860).

220. *See* National Archives, *Law and Appellate Records of the U.S. Circuit Court for the Eastern District of Pennsylvania, 1790–1847*, Microfilm Publication M969 (listing filed suits by plaintiff).

221. Database of patent suits filed in the U.S. Circuit Court for the Southern District of New York, on file with author.

222. *See* Christopher Beauchamp, *The First Patent Litigation Explosion*, 125 Yale L.J. 848, 848 (2016).

223. *Id.* at 860–62 (describing the emergence of litigation campaigns in the 1830s and 1840s).

224. *See* BATHE & BATHE, *supra* note 1, at 139.

found his system in operation and encouraging its adoption where it was not already used.[225] The enforcement effort was centrally managed but locally entrepreneurial: Evans financed and oversaw litigation, while his agents worked for a commission based on the value of licenses and interest.[226] Lawsuits were a calculated cost of the business model. In an 1817 letter ordering substantial payments to his counsel in Philadelphia and NYC for litigation-related expenses, Evans explained that "we must continue to risk 100$ to recover $10,000."[227] Some cases resulted in substantial damages: Evans reported one case where demand for a $40 license ended with recovered damages of $2,148.[228] But the principal objective of suing was to bring recalcitrant millers into line and secure their acquiescence in licensing.[229]

The growing organization of Evans's enforcement effort contrasted with the underdeveloped state of the patent law itself. Supreme Court Justice Joseph Story found the law wholly "vague and unsettled" when he first took the bench in 1811,[230] and the nascent patent jurisprudence that emerged over the next decade consisted mostly of his own reported decisions on circuit in Massachusetts and others from Justice Bushrod Washington in Pennsylvania.[231] The Supreme Court decided its first patent case in 1810, a dispute about an assignee's right to sue.[232] The next four cases decided at the high court were *Evans v. Jordan*[233] in

225. Deposition of Joseph Evans, *supra* note 214.

226. *See, e.g.*, Letter from John Moody to Thomas Jefferson (October 20, 1808) (on file with the National Archives), https://founders.archives.gov/documents/Jefferson/99-01-02-8907 [https://perma.cc/JD93-HD7X] (offering a license and explaining his commission as an employee of Oliver Evans).

227. Letter from Oliver Evans to David Muhlenberg (December 20, 1817), *reprinted in* BATHE & BATHE, *supra* note 1, at 259 (noting payments of $200 and $1,000 to Evans's attorneys).

228. Letter from Oliver Evans to Daniel Woods (April 5, 1817), *reprinted in* BATHE & BATHE, *supra* note 1, at 243.

229. *See, e.g.*, Letter from Joseph Evans to Oliver Evans (April 8, 1816), *reprinted in* Bathe & Bathe, *supra* note 1, at 231 (approving selection of a particular litigation target on the grounds that "if you will defeat him, the whole state will pay you").

230. JOSEPH STORY, 1 LIFE AND LETTERS OF JOSEPH STORY 237 (William W. Story ed., Boston, Little & Brown 1851).

231. *See* WALTERSCHEID, *supra* note 84, at 359 (noting that the two justices were among the first to have their circuit opinions reported and together accounted for forty out of the fifty-eight cases reported or referenced from the circuits before 1835).

232. Tyler v. Tuel, 10 U.S. (6 Cranch) 324 (1810).

233. 13 U.S. (9 Cranch) 199 (1815).

1815, *Evans v. Eaton*[234] in 1818, *Evans v. Eaton*[235] again in 1822, and *Evans v. Hettich*[236] in the same year. It is perhaps not surprising that Evans's cases reached the Supreme Court when other patents did not. No other patent of the time equaled the milling patent's combination of large financial stakes and widespread enforcement. But it meant that Evans's rights arrived at the Court with every issue they presented being a matter of first impression for that body.

B. Oliver Evans and the Principles of Patent Law

The first Supreme Court case dealt with an issue peculiar to Evans. The appeal of *Evans v. Jordan*, Chief Justice Marshall's decision on circuit upholding Evans's rights against infringers who erected their mills before the congressional renewal,[237] came before the whole Court in 1815. In a brief disposition, the unanimous Court affirmed Marshall's conclusion as a matter of statutory construction, finding the act "free from all ambiguity" in protecting only activity prior to the date of the renewal.[238] For our purposes, the most salient aspect of the decision may be what it did not say: Justice Bushrod Washington's opinion made no mention of Marshall's "inchoate right" language; in fact it employed none of the language of property, natural rights, or public right that had occupied Evans or his adversaries below.[239] The decision set a tone that others would follow: the Supreme Court's *Evans* cases did not engage in deep musing about the nature of the patent right, but instead focused on the practical implementation of the law.

Practical questions were fundamental, though. For example, the *Evans* cases forced the Court to consider what made an invention "new"—or more precisely, what qualified as prior art that would invalidate a patent. This was a question that the everyday administration of the 1793 Patent Act did not answer, since the statute allowed any applicant to receive a patent with no prior examination for novelty.[240] The Act left it for litigation to invalidate a patent for an invention that was "originally" discovered, used, or described before the patentee's invention.[241] American courts only began to define these terms in a

234. 16 U.S. (3 Wheat.) 454 (1818).

235. 20 U.S. (7 Wheat.) 356 (1822).

236. 20 U.S. (7 Wheat.) 453 (1822).

237. *See supra* notes 159–1170 and accompanying text.

238. Evans v. Jordan, 13 U.S. at 202.

239. The defendants did argue these points to the Court. *See id.* at 201.

240. Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 318–21 (requiring no investigation before the Secretary of State could issue a patent).

241. *Id.* § 6, 1 Stat. at 322 (invalidity where the invention "was not originally discovered by the patentee, but had been in use, or had been described in some public work anterior to the supposed discovery"); *id.* § 10, at 323

systematic way in the 1810s.[242] Evans's patent presented a rich environment for doing so, thanks to his opponents mounting a lengthy effort to find machines that purportedly anticipated the components of his system,[243] and Evans resisting on the grounds that those machines were obscure, ineffective, or abandoned.

The Supreme Court generally resolved these questions of novelty in ways we would find familiar now, holding that if earlier uses of Evans's technology were proved, they would invalidate his patent. But that does not mean the Court's conclusions were uncontestable at the time. Among other arguments that would seem off-the-wall today, Evans's attorneys contended that a prior use could not invalidate a patent when the inventor was unaware of it.[244] Pushing back still further against obscure prior art, they argued that prior use of an invention could not invalidate a patent unless the older machine was useful enough to receive a patent of its own.[245] For good measure, they argued that that challenges to the validity of Evans's patent were statutorily foreclosed by both the Act for the Relief of Oliver Evans[246] and by the Patent Act's hazily understood provision for suits to repeal an invalid grant, which limited affirmative challenges to the first three years of a patent's life.[247] None of these contentions prevailed, but Evans's assertions about prior art were not necessarily challenging well-settled U.S. law. Other litigants at the time similarly argued that prior use would only

(permitting an action to repeal the patent where "the patentee was not the true inventor or discoverer").

242. *See, e.g.*, Evans v. Eaton, 16 U.S. (3 Wheat.) 454, 514 (1818) (determining that the words "originally discovered" make void any subsequent patent, even if the patentee had no knowledge of the prior discovery).

243. *See id.* at 472–73; Memorial to Congress of Sundry Citizens Praying Relief from the Oppressive Operation of Oliver Evans' Patent, *supra* note 186, at 1–2.

244. *See, e.g.*, Evans v. Eaton, 8 F. Cas. 846, 850 (C.C.D. Pa. 1816) (No. 4,559) (reporting counsel's distinction between a "first" discovery and an "original" discovery under which "[i]t is not necessary that the plaintiff should be the first discoverer, if he was a real bona fide discoverer, without knowing that a similar discovery had previously been made"). Evans's lawyers later retreated from this position, claiming they meant only that prior use did not count if it was private or secret. *See* Evans v. Eaton, 16 U.S. at 502.

245. *See* Evans v. Eaton, 16 U.S. at 487–88 (reporting counsel's argument that "[t]he *useful* thing *patented* prevails over one, not useful nor patented, though in *previous* partial existence").

246. *See id.* at 486 (reporting counsel's claim that "[t]he special act is an absolute grant to him, binding on all the community, and precluding any inquiry into the originality of the invention").

247. *See* Evans v. Eaton, 8 F. Cas. 846, 855 (C.C.D. Pa. 1816) (No. 4,559); *see also* Beauchamp, *supra* note 10, at 674 (noting confusion over the meaning of the repeal provision).

anticipate a later patent if it were widely known or adopted.[248] Only with Justice Story's influential decision to the contrary in *Bedford v. Hunt*[249] (1817) and Justice Washington's jury charge in the 1816 trial of *Evans v. Eaton*[250] was this idea officially rebuffed in the circuit courts. The Supreme Court's first decision in *Evans v. Eaton* confirmed that even where "the patentee had no knowledge of this previous use or previous description; still his patent is void."[251]

The greatest doctrinal legacy of the *Evans* cases came in the law of patent claiming. Numerous commentators have seen *Evans v. Eaton* (1822) as a foundational moment for the emergence of the claim as a defining feature of the patent.[252] The requirement that a patentee should include one or more explicit claims identifying the protected invention did not enter the statute until 1836,[253] but it followed judicial developments among which *Evans v. Eaton* was central.

Again, the special circumstances of Evans's grant pushed the courts to grapple with the indeterminacies of the law. As issued in 1808, the Evans patent included a kind of claim, but not in any format that one would recognize today.[254] The specification identified two "principles"—one for powering the milling process from the motive power of the mill

248. *See, e.g.*, Bedford v. Hunt, 3 F. Cas. 37, 38 (C.C.D. Mass. 1817) (No. 1,217) ("It has been argued by the plaintiff, that the defence [sic] set up by the statute does not apply, except in cases, where the invention . . . has been before generally known and in general use, among persons engaged in the art or profession, to which it properly belongs.").

249. *Id.*; *see also* THOMAS GREEN FESSENDEN, AN ESSAY ON THE LAW OF PATENTS FOR NEW INVENTIONS 58–59 (Boston, Charles Ewer, 2d ed. 1822) (citing *Bedford* as the source of principles recognized in Evans v. Eaton).

250. 8 F. Cas. 846, 853 (C.C.D. Pa. 1816) (No. 4,559).

251. Evans v. Eaton, 16 U.S. at 513–14.

252. *See, e.g.*, Tun-Jen Chiang, *Fixing Patent Boundaries*, 108 MICH. L. REV. 523, 540 (2010) (footnote omitted) ("[From *Evans* and similar cases, the requirement of explicit claims arose . . . ."); Joshua D. Sarnoff, *The Historic and Modern Doctrines of Equivalents and Claiming the Future, Part I (1790–1870)*, 87 J. PAT. & TRADEMARK OFF. SOC'Y 371, 383–85 (2005) (calling the case "seminal"); Karl B. Lutz, *Evolution of the Claims of U.S. Patents*, 20 J. PAT. OFF. SOC'Y 134, 148 (1938) (noting that *Evans v. Eaton* "accelerated the development of the claim"). *But see* John F. Duffy, *The* Festo *Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 SUP. CT. REV. 273, 309 n.111 (2002) (noting that claims did not originate with *Evans v. Eaton* and often did not conform to the instructions of that decision).

253. Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119 (requiring the patentee to "particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery").

254. The original patent is lost, but a copy of the text appears in the report of *Evans v. Eaton*, 16 U.S. at 461–71.

rather than manually, and the other for keeping the meal in constant motion as it was ground, bolted, and dried—and claimed "[t]he application of those principles . . . as my invention."[255] The patent then listed a numbered series of machines for carrying them out: the elevator, conveyer, hopperboy, drill, and kiln-drier.[256] Of the hopperboy, Evans added that he claimed "as my invention, the peculiar properties or principles which this machine possesses."[257] The patent's distinction between principle and application tracked the language of the 1793 Patent Act, which instructed a patentee to "fully explain the principle [of his machine], and the several modes in which he has contemplated the application of that principle."[258] But the statute gave courts little instruction on how to translate the patentee's descriptions into the scope of the right.

The alleged infringement in *Evans v. Eaton* turned not on the use of Evans's system as a whole, but on the use of just one machine, the hopperboy. At trial in the circuit court, Justice Washington saw no infringement, holding that the patent covered the complete system, not its individual components.[259] The Supreme Court reversed, with Chief Justice Marshall apparently torn over the question, but concluding that the act of Congress restoring Evans's rights was meant to protect all of the inventor's machines separately.[260]

On remand, the scope of Evans's rights once again proved problematic, but now as a matter of validity. If the hopperboy were a protected invention in its own right, Washington reasoned, then Evans had to explain the difference between his "improved" hopperboy and the relevant prior art: in this instance a form of mechanical hopperboy allegedly operated by one Christian Stouffer and his family in the 1770s and early 1780s.[261] The lack of any distinguishing claim was fatal. Evans's "patent for an improvement is void," Washington instructed

255. *Id.* at 464–65.

256. *Id.* at 465–69.

257. *Id.* at 468.

258. Patent Act of 1793, ch. 11, § 3, 1 Stat. 318, 321–22.

259. Evans v. Eaton, 8 F. Cas. 846, 854 (C.C.D. Pa. 1816) (No. 4,559) (charging jury as follows: "But is the exclusive right to the hopperboy granted by this patent? It certainly is not, although this machine constitutes a part of the improvement of which the plaintiff was the original discoverer, and it is for that improvement, and that only, for which the grant is made.").

260. Evans v. Eaton, 16 U.S. at 506–07. Marshall wrote apologetically to Washington that he and his colleagues believed the Evans act to authorize "a much greater latitude than is authorized by the general patent law." Letter from John Marshall to Bushrod Washington (Oct. 28, 1818), *reprinted in* 8 THE PAPERS OF JOHN MARSHALL: MARCH 1814–DECEMBER 1819, at 200 (Charles F. Hobson et al. eds., 2014).

261. Evans v. Eaton, 8 F. Cas. 856, 857–60 (C.C.D. Pa. 1818) (No. 4,560).

the jury, "because the nature and extent of his improvement are not stated in his specification."[262]

On this point Washington was working hand in glove with the leading American authority on patents, Justice Joseph Story. Story had recently announced on circuit that a patent that "mixes up the old and the new, and does not distinctly ascertain for which, in particular, the patent is claimed . . . must be void."[263] If such a patent meant to include the old, he argued, it was invalid for claiming more broadly than the invention; if it did not, it was invalid for failing to inform the court and the public of its scope.[264] Story then took the opportunity of *Evans v. Eaton*, as the first case of patent validity to reach the Supreme Court, to write a "Note on the Patent Laws," which appeared as an appendix to the case in the official Reports.[265] The Note stressed this same point repeatedly and in stern italics.[266]

Evans v. Eaton's second visit to the Supreme Court, in 1822, established the doctrine for the Court as a whole. Justice Story's opinion confirmed that an act of distinguishing the invention from the prior art was "indispensable,"[267] both to enable scrutiny of the patent's novelty and to give notice to the public of its scope.[268] The decision delivered the coup de grace to Evans's patent, which was "defective in not specifying that improvement."[269]

Evans v. Eaton was not the origin of the patent law's distinct claiming requirement,[270] just the moment when it acquired the imprimatur of the Supreme Court. It would be wrong, though, to think that the case merely ratified conventional wisdom. The 1822 decision was neither inevitable nor a product of consensus on the Court. In an

262. *Id.* at 859.

263. Lowell v. Lewis, 15 F. Cas. 1018, 1020 (C.C.D. Ma. 1817) (No. 8,568); *see also* Lutz, *supra* note 252, at 138–39 (describing earlier rulings by Story to similar effect).

264. *Lowell*, 15 F. Cas. at 1020.

265. *See* Joseph Story, *Note on the Patent Laws*, 16 U.S. (3 Wheat.) app. 13, at 27 (1818) (referring to *Eaton* as "the principal case in the text" to which the Note was attached).

266. *See id.* at 25, 27 (reiterating that "if the invention is *definitively* described in the patent and specification, *so as to distinguish it from other inventions before known,* the patent is good").

267. Evans v. Eaton, 20 U.S. (7 Wheat.) 356, 434–35 (1822).

268. *Id.* at 434.

269. *Id.* at 435.

270. *See, e.g.*, Story, *supra* note 265, at 21–22, 27 (citing Story's earlier decisions and English antecedents).

era of relatively few dissents, the case split the justices 4–3.[271] Justice Livingston's dissent lamented that Story's decision would have "a very extensive, if not a disastrous bearing on many other patents for improvements, and will in fact amount to a repeal of many of them."[272] To invalidate "a patent for a highly useful improvement" like Evans's was "a very high penalty, and should not be lightly inflicted, unless rendered absolutely necessary by law."[273]

Behind the dissenters' concern for the reliance interests of existing patentees lay a larger dispute over sources of authority in American patent law. Story's impulse in his early patent law writings (and in his jurisprudence generally) was to draw on English law.[274] The approach that he and Washington took of the patent specification rested on their view of the English cases.[275] By contrast, the dissenters in *Evans v. Eaton* urged their brethren to be "extremely cautious in adopting the rules which have been introduced into other countries, and under laws not in every respect like our own."[276] The English cases "which . . . seem to have been implicitly followed in this country" almost all post-dated the Revolution, were mostly subsequent to the American patent acts, and were "made on a British act of Parliament very unlike our own."[277] In particular, English decisions invalidating patents for defective specifications were "not of authority."[278] The back-and-forth struggle over Story's anglicizing patent law was a recurring theme of the 1820s, with the question of how strict American law should be in invalidating patents being constantly unsettled as a result.[279]

Oliver Evans did not live to see his patent felled in 1822 by the rising strain of English strictness in patent doctrine. He had died in 1819, his health declining rapidly after fire gutted his prized engineering

271. Evans v. Eaton, 20 U.S. at 435, 452.

272. *Id.* at 436 (Livingston, J. dissenting).

273. *Id.* at 448.

274. *See* R. KENT NEWMYER, SUPREME COURT JUSTICE JOSEPH STORY: STATESMAN OF THE OLD REPUBLIC 139–40 (1985); Frank D. Prager, *The Changing Views of Justice Story on the Construction of Patents*, 4 AM. J. LEGAL HIST. 1, 10–11 (1960).

275. *See* Story, *supra* note 265, at 21–23; Evans v. Eaton, 8 F. Cas. 856, 860 (C.C.D. Pa. 1818) (No. 4,560).

276. Evans v. Eaton, 20 U.S. at 439 (Livingston, J. dissenting).

277. *Id.*

278. *Id.* at 451.

279. *See, e.g.*, Pennock v. Dialogue, 27 U.S. (2 Pet.) 1, 6, 9, 18 (1829) (arguments of counsel and opinion of the Court on the applicability of English precedent); McGaw v. Bryan, 16 F. Cas. 96, 97 (S.D.N.Y. 1821) (No. 8,793) (ridiculing the appeal to English authority as a "magic influence"); *see also* Beauchamp, *supra* note 10, at 681–82; Prager, *supra* note 274, at 11.

works—one last consignment of his inventions to the flames.[280] Yet the inventor made an appearance in his last case. Counsel for the patentee, attempting to tack away from the problem of defining an "improvement" patent, worked instead to compare Evans to the archetypal great inventors of the day, men whose patents had likewise been central to their personal mythologies. "Upon what ground, then, can it be said that he is not an original inventor, when [James] Watt was solemnly adjudged, and [Robert] Fulton unanimously allowed to be so?"[281] Brilliant, frustrated, querulous, and prideful as he was, Oliver Evans himself could not have asked the question any better.

CONCLUSION

The life of Oliver Evans encompassed all the highs and lows of the patent system in the early Republic. From these events, one can—and Evans did—tell a story of weak patents, in which widespread piracy, public indifference, and legal uncertainty combined to leave the patentee helpless and frustrated. At the same time, Evans's career included legislative support from both states and the national government, federal courts that enforced his rights in hundreds of suits across multiple jurisdictions, and a model of patent assertion that enabled the inventor to specialize and invest in further invention and innovation. Whether the early U.S. patent system delivered consistently on its promises of protection is a subject for another day. For now, suffice to say that Evans experienced all the contradictions of early American patent law.

First, more than any other inventor, he participated in the full variety of patent systems in the new United States, above all by traversing both the state and federal patent regimes. Yet his experience suggests more continuity across the great 1790 divide than is generally recognized. With their common basis in the practice of petitioning for government assistance, state legislative grants were more bureaucratic and early federal patents more irregular than one might expect. When we seek to reconstruct the conceptual world of the early patent system, the creation of a general national patent statute may not have been the sharp break that is often assumed.

Second, Evans's role as a polemicist reveals underappreciated nuance in the discourse of patent rights. Although Evans was both the leading campaigner for stronger patent rights in the early Republic *and* the leading advocate of a natural-property conception of the patent, the debates around his rights do not easily reduce to the "privilege versus property" framework of recent years. The early nineteenth century had a greater range of frames for discussing patents and patentees, including not only arguments based on utility and property but also those

280. Federico, *supra* note 94, at 681.

281. Evans v. Eaton, 20 U.S. at 412.

founded on compensation and relief. And the supposedly foundational statements of patent philosophy that appeared around Evans's rights, such as Marshall's decision in *Evans v. Jordan* and Jefferson's denial that patent rights arose from a natural property right, are on closer inspection revealed to be less clear cut than modern commentators assume.

Third, Evans, the man most aggrieved by the decisions of the early federal courts in patent matters, was also a major spur to their work. The volume and controversy of his litigation, the confusing construction of his patent document, and the unusual context of his legislative extension all forced judges to work out—and gave them the opportunity to declare—what would later become basic principles of American patent law. That Evans died disgusted with their decisions even before the Supreme Court finally invalidated his patent in 1822 is a good reminder to be careful what you ask for.