



School of Law

O'REILLY V. MORSE

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I. INTRODUCTION

On May 24, 1844, Samuel Finley Breese Morse tapped out the first message on the first fully operational electro-magnetic telegraph line: "What hath God wrought!"¹ Contrary to popular myth, this was not Morse's first telegraph transmission,² as he had been giving public demonstrations and testing his telegraph by sending messages since 1838.³ But this is now the

* Professor of Law, George Mason University School of Law. For comments on this draft or on my earlier research, thank you to Robert Brauneis, Mark Janis, Zorina Khan, Kali Murray, Henry Smith, and to the participants at the Hoover IP² Conference on Inventions and the U.S. Patent System, the 2010 Intellectual Property Scholars Conference at UC-Berkeley, the History of Intellectual Property Seminar at George Washington University School of Law, the IP Colloquium Series at Marquette University Law School, and the Visiting Speaker Series at the U.S. Patent & Trademark Office. Martin Desjardins, Ryan Ellis, and Jake Mace provided invaluable research assistance.

¹ HAROLD EVANS, *THEY MADE AMERICA: FROM THE STEAM ENGINE TO THE SEARCH ENGINE: TWO CENTURIES OF INNOVATORS* 74 (2004).

² See, e.g., Alexis C. Madrigal, *The First Long-Distance Telegraph Message, Sent This Day in 1844: 'What Hath God Wrought?'*, *THE ATLANTIC* (May 24, 2013), <http://www.theatlantic.com/technology/archive/2013/05/the-first-long-distance-telegraph-message-sent-this-day-in-1844-what-hath-god-wrought/276226/> (last visited March 17, 2014); JOSHUA D. WOLFF, *WESTERN UNION AND THE CREATION OF THE AMERICAN CORPORATE ORDER, 1845-1893*, at 16 (2013) ("On May 24, 1844, Morse transmitted the first telegraph message—"What hath God wrought"—from the chamber of the Supreme Court to the Mount Clare depot in Baltimore.").

³ See *Report on Prof. Morse's Electro-Magnetic Telegraph*, 25 J. FRANKLIN INSTITUTE 106, 107 (Feb. 1938) ("The operation of the telegraph, as exhibited to us, was very satisfactory."). In early 1838, Morse tested his telegraph on a transmission line running two miles in length, sending the message, "*Railroad cars just arrived, 345 passengers.*" *Professor Morse's Electro-Magnetic Telegraph*, *NEW YORK OBSERVER*, Jan. 27, 1838. In follow-on public demonstrations in New York City in 1838, he transmitted the message (among others), "ATTENTION, THE

date and the message—a line quoted from the Bible by a deeply religious man⁴—that marks the beginning of a telecommunications revolution in instantaneous transmission of information that continues to this day. Ten years later, Chief Justice Roger Taney announced his opinion for a 5-3 divided Supreme Court in *O'Reilly v. Morse* (1854) that invalidated a portion of Morse's primary patent on his invention.⁵ Similar to the communications revolution born of Morse's invention of the electro-magnetic telegraph, Chief Justice Taney's *Morse* opinion spawned a legal revolution in American patent law whose effects continue to this day.⁶ Unfortunately, just like the myth that has arisen about Morse's first telegraphic transmission, Chief Justice Taney's decision has become shrouded in a myth today—that this decision was correct.⁷

Given this conventional wisdom, Chief Justice Taney's *Morse* opinion is deemed to be a fundamental and foundational case in American patent jurisprudence: it is reprinted in casebooks,⁸ it is discussed in modern scholarship and in treatises,⁹ and federal courts continue to rely on it,¹⁰ especially the Supreme Court in its reengagement with patent jurisprudence in recent

UNIVERSE!" See KENNETH SILVERMAN, *LIGHTNING MAN: THE ACCURSED LIFE OF SAMUEL F.B. MORSE* 166 (2004).

⁴ See DANIEL WALKER HOWE, *WHAT HATH GOD WROUGHT: THE TRANSFORMATION OF AMERICA* 2-3 (2007); SILVERMAN, *supra* note 3, at 245-46. The quote is from Numbers 23:23.

⁵ See *O'Reilly v. Morse*, 56 U.S. (15 How.) 62 (1854).

⁶ See ROBERT P. MERGES & PATRICK F. DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 114 (5th ed. 2011) ("Yet Morse's invention also occurred at the beginning of a revolution in patent law as significant as the one in communications.").

⁷ Patent scholars and judges, however, engage in what William Blackstone would have called a debate of "scholastic refinement" about the underlying legal justification for the *Morse* decision. 2 BLACKSTONE, *COMMENTARIES* *9 (speaking of the differences between the natural rights philosophers Hugo Grotius, Samuel Pufendorf, and John Locke). See *infra* note 32 (describing the dispute among scholars today as to whether *Morse* is an enablement or patentable subject matter case).

⁸ See ROBERT P. MERGES & PATRICK F. DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 108-14 (5th ed. 2011); F. SCOTT KIEFF ET AL., *PRINCIPLES OF PATENT LAW: CASES AND MATERIALS* 156-63 (5th ed. 2011); CRAIG A. NARD, *THE LAW OF PATENTS* 88-91 (2d ed. 2011).

⁹ See, e.g., CRAIG A. NARD & R. POLK WAGNER, *PATENT LAW* 56-58 (2008); JANICE M. MUELLER, *AN INTRODUCTION TO PATENT LAW* 93 (2d ed. 2006); Lori Andrews et al., *When Patents Threaten Science*, 314 *SCIENCE* 1395-96 (Dec. 2006); ROGER E. SCHECHTER & JOHN R. THOMAS, *PRINCIPLES OF PATENT LAW* 187 (2004).

¹⁰ See, e.g., *Diamond v. Diehr*, 450 U.S. 175, 188 (1981); *Parker v. Flook*, 437 U.S. 584, 592 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 69 (1972); *Ultramercial, Inc. v. Hulu, Inc.*, 722 F.3d 1335, 1344-45 (Fed. Cir. 2013); *CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1280-81 (Fed. Cir. 2013) (en banc) (Lourie, J., concurring); *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1346 n.4 (Fed. Cir. 2010) (en banc); *In re Nuijten*, 500 F.3d 1346, 1368-69 (Fed. Cir. 2007) (Linn, concurring in part and dissenting in part); *Hercules Inc. v. Exxon Corp.*, 497 F.Supp. 661, 681 (D. Del. 1980).

years.¹¹ Few nineteenth-century patent law decisions share this universal approbation today. But this conventional wisdom obscures an important truth: it is a profoundly anachronistic judgment, failing to account for the historical context in which Morse invented, patented and ultimately litigated his innovative telegraph. As such, it fails to recognize the deeply flawed reasoning in Chief Justice Taney’s opinion, which was driven more by his personal policy prejudices and less by law, and thus it fails to recognize how Chief Justice Taney departed substantially from both substantive and procedural patent doctrines at that time.

Through a careful review of rediscovered primary source materials, including the Supreme Court’s complete case record for *O’Reilly v. Morse*, along with some secondary sources, this paper appropriately places Chief Justice Taney’s *Morse* opinion in its proper historical context. This history is important for at least two reasons to modern-day lawyers and scholars. First, the story of Morse’s invention, commercial exploitation and litigation of his patented electro-magnetic telegraph belies many claims about the alleged unique nature of twenty-first-century inventive activities and how patents are commercialized today, especially through licensing. Given the prominent public policy debates about patent licensing companies (known in the vernacular as “patent assertion entities” or “patent trolls”), one finds that such issues are not new and that both patent licensing and extensive patent litigation have long been features of the American patent system since the early nineteenth century.¹²

¹¹ See *Mayo Collab. Servs. v. Prometheus Labs, Inc.*, 132 S. Ct. 1289, 1293-94 (2012); *Bilski v. Kappos*, 130 S. Ct. 3218, 3253 (2010); *Laboratory Corp. v. Metabolite Labs., Inc.*, 548 U.S. 124, 126 (2006) (Breyer, J., dissenting).

¹² See B. Zorina Khan, *Trolls and Other Patent Inventions: Economic History and the Patent Controversies in the Twenty-First Century*, GEORGE MASON UNIVERSITY LAW REVIEW (forthcoming 2014) (draft available at <http://cpip.gmu.edu/wp-content/uploads/2013/09/Khan-Zorina-Patent-Controversy-in-the-21st-Century.pdf>); Naomi R. Lamoreaux, Kenneth L. Sokoloff, and Dhanoos Sutthiphisal, *Patent Alchemy: The Market for Technology in US History*, 87 BUSINESS HIST. REV. 3 (Spring 2013); Hearing on Demand Letters and Consumer Protection: Examining Deceptive Practices by Patent Assertion Entities, Senate Committee on Commerce, Science, and Transportation, Subcommittee on Consumer Protection, Product Safety, and Insurance (Nov. 7, 2013) (Prepared Testimony of Adam Mossoff) (available at http://www.commerce.senate.gov/public/?a=Files.Serve&File_id=c5cc328a-af61-4f12-bea7-e2ae6fb42ce3); Adam Mossoff, *Patent Licensing and Secondary Markets in the Nineteenth Century* [draft paper on file with author].

Second, and most important, a complete and proper account of the litigation concerning Morse’s patent on the electro-magnetic telegraph provides crucial insights into the *Morse* decision, which continues to cast a large shadow on the ongoing policy and legal debates in patent law to this day. This historical account reveals that this shadow is corrupted. What *Morse* has come to stand for today—as a matter of law and policy—is entirely different from what actually happened in a lawsuit that spanned many years, involved multiple court decisions, and ultimately produced twelve hours of oral arguments in late 1852 and continuing arguments in both printed and oral form with the Justices over the span of a year before Chief Justice Taney handed down his decision in early 1854.¹³

Consistent with his other decisions in constitutional law and patent law,¹⁴ Chief Justice Taney’s personal biases led him to ignore established legal practices and doctrine at that time, twisting Morse’s patent into something it did not mean in the *Morse* opinion. As a fervent Jacksonian Democrat, Chief Justice Taney viewed patents as monopoly grants on par with other monopoly grants that should be severely restricted in their legal protections,¹⁵ which was contrary to the established definition and treatment of patents as property rights in innovation.¹⁶ Just as modern lawyers, scholars and judges decry similar behavior by Chief Justice Taney in

¹³ See 5 CARL B. SWISHER, *THE HISTORY OF THE SUPREME COURT OF THE UNITED STATES: THE TANEY PERIOD, 1836-64*, at 497-501 (1974) (describing the lengthy oral arguments and the ongoing arguments in both official and unofficial contexts and in both printed and oral form over the course of 1853).

¹⁴ See *Dred Scott v. Sandford*, 60 U.S. 393 (1857); Adam Mossoff, *Exclusion and Exclusive Use in Patent Law*, 22 HARV. J. L. & TECH. 321, 341-42 (2009) (discussing Chief Justice Taney’s judicial rewriting of the patent statutes in his 1852 decision in *Bloomer v. McQuewan*).

¹⁵ See THE OXFORD COMPANION TO AMERICAN LAW 783 (Kermit L. Hall et al. eds., 2002) (discussing Taney’s “fervent” commitment to Jacksonian ideals).

¹⁶ See Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent “Privilege” in Historical Context*, 92 CORNELL L. REV. 953 (2007); Adam Mossoff, *Patents as Constitutional Private Property: The Historical Protection of Patents under the Takings Clause*, 87 B.U. L. REV. 689 (2007); cf. B. ZORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT, 1790-1920*, at 67 (2005) (“Patent laws ensured the security of private property rights in invention and facilitated the development of extensive and deep markets in such rights.”).

Dred Scott,¹⁷ it is time to set the historical record straight about *Morse*. It is long past due to ask of the effect on *Morse* on modern patent law: “What hath Taney wrought?”

In three parts, this paper will explain how today’s understanding of Chief Justice Taney’s *Morse* opinion is in conflict with the actual opinion in its historical and legal context. First, it will identify the conventional wisdom today that Chief Justice Taney correctly reined in the hubris of a self-aggrandizing inventor who improperly tried to claim legal protection for something beyond what he actually invented. This is identified as “the *Morse* myth.” Second, it details the invention and patenting of the electro-magnetic telegraph. Third, it details the commercialization and ultimate litigation of Morse’s patents on the electro-magnetic telegraph, revealing for the first time for legal scholars and lawyers how O’Reilly was a willful infringer of Morse’s patents and who deliberately tormented Morse and his business associates for years in both the courts of public opinion and law. O’Reilly effectively exploited anti-monopoly rhetoric that has always been part of the patent policy debates in the United States in taking his case all the way to the Supreme Court, where he achieved only a pyrrhic victory in convincing Chief Justice Taney to invalidate only a portion of Morse’s patent. Nonetheless, the ill effects of the *Morse* myth on the American patent system continue to this day.

II. THE *MORSE* MYTH

There are many different inventions claimed within Samuel F.B. Morse’s primary patent on his electro-magnetic telegraph, and thus it is necessary to be clear about exactly what portion of his patent now constitutes the *Morse* myth. In fact, Morse is more widely known today for his invention of a telegraphic transmission code—what we now call Morse Code—than for his invention of the electro-magnetic telegraph that used this code. Morse’s invention of this unique binary code of dots and dashes was a significant step beyond the ineffective signal systems used

¹⁷ See, e.g., DAVID P. CURRIE, THE CONSTITUTION IN THE SUPREME COURT: THE FIRST HUNDRED YEARS 1789–1888, at 264 (1985) (describing Taney’s *Dred Scott* opinion as “bad judicial politics”); Jason H. Silverman, *The Odd Couple of American Legal History*, 10 GREEN BAG 2d 511, 523 (2007) (book review) (observing that “virtually all scholars have condemned [*Dred Scott*] as an example of the dangers of judicial activism.”).

in other less practicable telegraphs independently developed at that time, which entailed excessively complicated circuitry and error-prone recording mechanisms to transmit individual letters or words.¹⁸ As such, his binary code was essential to what made his electro-magnetic telegraph a uniquely innovative and successful technological invention,¹⁹ and thus Morse included it in his patent.²⁰

The *Morse* myth, though, does not refer to Morse Code, but rather to another portion of Morse’s patent covering the technological features of his innovative electro-magnetic telegraph. By the time of the litigation against O’Reilly, Morse’s original patent on the telegraph, which first issued on June 20, 1840 as Patent No. 1,647, had been twice surrendered by Morse back to the Patent Office for revisions “on account of defects in the specifications which formed parts of the two patents issued.”²¹ It was now known as Reissue Patent No. 117.²² Reissue Patent No.

¹⁸ See *Report on Prof. Morse’s Electro-Magnetic Telegraph*, *supra* note 3, at 108 (“[T]he idea of using electro-magnetism for telegraphic purposes has presented itself to several different individuals, and that it may be difficult to settle among them the question of originality. . . . But the plan of Professor Morse is, so far as the committee are informed, entirely different from any of those devised by other individuals, all of which act by giving different *directions* to magnetic needles, and would therefore require several circuits of wires between all the stations. . . . The advantages [are] . . . that the signals may be given at night and in rains, snow, and fogs, when other telegraphs fail.”); *The English and American Telegraphs*, NEW YORK OBSERVER, June 7, 1845 (“The Telegraph (Wheatstone’s) is really as pretty a failure as I ever saw. Positively it requires *an hour* for them to transmit a sentence which you could transmit it in *five minutes*. The telegraph works by the deflection of two needles, and they deflect so slowly, that the letters can scarcely be read at all. They use five wires, each composed of three smaller ones twisted together. Now I cannot perceive what is gained by this. In my opinion there is a *loss*.”).

¹⁹ See KEVIN G. WILSON, DEREGULATING TELECOMMUNICATIONS: U.S. AND CANADIAN TELECOMMUNICATIONS, 1840-1997, at 10 (2000) (“The genius of the Morse system was its simplicity and reliability A key component of the system was the code developed by Morse to convert the letters of the alphabet into dots and dashes (short and long electrical signals).”); DAVID HOCHFELDER, THE TELEGRAPH IN AMERICA, 1832-1920, at 74-76 (2012) (describing the efficiencies achieved by Morse’s transmission code in permitting compression of information).

²⁰ See U.S. Patent No. 1,647 (issued June 20, 1840). Claim 3 of Patent No. 1,647 was directed to the “use, system, formation and arrangement of type, and of signs, for transmitting intelligence.” Morse surrendered this patent and received Reissue Patent No. 79 on January 15, 1846, in which Claim 2 set forth a “system of signs consisting of dots and lines . . . for recording signals.” Morse later surrendered Reissue Patent No. 79 and received Reissue Patent No. 117 on June 13, 1848, in which Claim 5 was directed to the “system of dots and spaces, and of dots, spaces, and horizontal lines, for numerals, letters, words or sentences . . . for telegraphic purposes.” Claim 6 was directed to the combination of Morse Code with the specific “machinery for recording them.”

²¹ Bill of Complaint, *Morse et al. v. O’Reilly et al.*, Case Record, 4. The right of patent-owners to obtain a “reissue patent” was first established by the Patent Office without authorization under the patent statutes. When challenged, it was upheld in a unanimous decision in *Grant v. Raymond*, 31 U.S. (6 Pet.) 218 (1832) (Marshall, CJ). This is just one example of how patents were secured by early American courts as civil rights in fundamental property rights, which were expansively and liberally construed in favor of patentees. See Adam Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 16, at 1001-04 (discussing the reissue right).

²² See Reissue Patent No. 117 (issued June 13, 1848).

117 had eight claims with Claim 1 and Claim 8 each stating in general language Morse’s invention of “the first recording or printing telegraph by means of electro-magnetism,” as he writes in a portion of his lengthy Claim 1.²³ Claims 2 through 7 detail various aspects of the specific machinery or processes comprising his invention, such as the device that marks out the Morse Code (Claim 2), the circuit delivering electricity to the electro-magnet that can be turned on and off (Claim 3), Morse Code (Claim 5), and so on. In sum, Morse structured his patent claims such that he bookends his claims to the specific machinery, circuits and transmission code comprising one embodiment of his invention (Claims 2-7) with his claims to the pioneering technology of an electro-magnetic telegraph (Claims 1 and 8).

In *Morse*, Chief Justice Taney affirms the validity of Morse’s first seven claims (Claims 1-7) without comment.²⁴ (Notably, Claim 5 covered Morse Code, which was the binary language used in operating the hardware of the electro-magnetic telegraph, such as the circuit, the electro-magnet, the armature moved by the electro-magnet, etc.²⁵ This is arguably the first “software” patent claim issued by the Patent Office and upheld by the courts.)

After reviewing and rejecting O’Reilly’s argument that Morse was not the first inventor of the electro-magnetic telegraph,²⁶ which was just one of O’Reilly’s fourteen challenges to the validity of Morse’s patent,²⁷ Chief Justice Taney focuses almost the entirety of his opinion on Claim 8.²⁸ In fact, it is the only claim in Reissue Patent No. 117 that is quoted in Chief Justice Taney’s opinion (and thus is quoted in casebooks today²⁹), and thus it bears repeating here:

²³ Interestingly, neither Claim 1 nor Claim 8 were in the original Patent No. 1,647 that issued in 1840.

²⁴ *Morse*, 56 U.S. at 112 (“We perceive no well-founded objection . . . to his right to a patent for the first seven inventions set forth in the specification of his claims.”).

²⁵ See *infra* notes 76-79, and accompanying text (describing Morse’s telegraph).

²⁶ See *Morse*, 56 U.S. at 106-13.

²⁷ See *Morse*, 56 U.S. at 99-101 (recounting by the court reporter in introductory section before the Justices’ opinion the fourteen separate arguments by O’Reilly that Morse’s patent is invalid).

²⁸ See *Morse*, 56 U.S. at 112-24. With respect to O’Reilly’s twelve other arguments against Morse’s patent, Chief Justice Taney dismisses them in a single paragraph that begins: “We do not think it necessary to dwell upon the objections taken to the proceedings upon which the first patent was issued, or to the additional specifications of the reissued patent of 1848.” *Id.* at 112.

²⁹ See, e.g., MERGES & DUFFY, *supra* note 6, at 108.

Eighth. I do not propose to limit myself to the specific machinery or parts of machinery described in the foregoing specification and claims; the essence of my invention being the use of the motive power of the electric or galvanic current, which I call electro-magnetism, however developed for marking or printing intelligible characters, signs, or letters, at any distances, being a new application of that power of which I claim to be the first inventor or discoverer.

Chief Justice Taney’s negative reaction to Claim 8 is palpable. “It is impossible to misunderstand the extent of this claim,” he writes.³⁰ As he explains a few paragraphs later:

[Morse] shuts the door against inventions of other persons For he says he does not confine his claim to the machinery or parts of machinery, which he specifies; but he claims for himself a monopoly in its use, however developed, for the purpose of printing at a distance. . . . The court is of the opinion that the claim is too broad, and not warranted by law.³¹

From this characterization of Claim 8 by Chief Justice Taney has been borne the *Morse* myth: Morse was attempting to aggrandize to himself the entire field of electronic telecommunications far beyond what he had actually invented himself.

Aside from an ongoing dispute as to what specific legal rule is being used by Chief Justice Taney in what appears to be opaque legal analysis,³² the *Morse* myth is usually framed in one of two ways. On the one hand, some claim that Morse’s “eighth claim would have covered analog and digital data transmissions, telephonic and satellite communications—indeed, *electronic communications of all types*.”³³ Morse, according to these scholars, was claiming to be

³⁰ *Morse*, 56 U.S. at 112.

³¹ *Morse*, 56 U.S. at 113.

³² Although it is not relevant for understanding the *Morse* myth, it bears noting that scholars dispute what legal rule produces the correct result in *Morse*—whether Morse failed to disclose properly how to use the telegraph he was claiming as his invention or whether Morse attempted to claim the abstract idea of telecommunications as such. Compare F. SCOTT KIEFF ET AL., PRINCIPLES OF PATENT LAW: CASES AND MATERIALS 156 (5th ed. 2011) (*Morse* is an enablement case) with Kevin Emerson Collins, *Bilski and the Ambiguity of “An Unpatentable Abstract Idea,”* 15 LEWIS & CLARK L. REV. 37, 50 (2011) (*Morse* is a patentable subject matter case). Regardless of whether *Morse* is thought of as an enablement or patentable subject matter case, the shared assumption is that it was correct.

³³ Mark F. Grady & Jay I. Alexander, *Patent Law and Rent Dissipation*, 78 VA. L. REV. 305, 323 (1992) (emphasis added). See also *Ariad Pharm., Inc.*, 598 F.3d 1336, 1359 (Fed. Cir. 2010) (Newman, J., concurring) (observing that the *Morse* decision is a “classic case” reflecting “long-standing principles” in patent law, as the Court denied Morse’s “claims for the use of an electric current ‘however developed.’”); Brief for Petitioner at 22, *Dann v. Johnston*, No. 74-1033 (filed July 31, 1975) (“Morse’s idea of transmitting information at a distance by means of electromagnetic force . . . cannot be patented.”).

“responsible for creating the entire ‘art’ or process of *electric telegraphy*.”³⁴ Professor Jay Dratler states that “Morse’s eighth claim would have covered, among other things, telephone, radio, television, microwave, wireless, and Internet communication”³⁵ Professors Christina Bohannan and Herbert Hovenkamp breathlessly proclaim that “Morse was trying to commandeer all future technologies for accomplishing something.”³⁶

On the other hand, some scholars reject these overwrought allegations about the scope of Claim 8 allegedly covering all forms of communications, because the terms of Claim 8 expressly limit it to only those telecommunications that result in “marking or printing intelligible characters, signs, or letters.”³⁷ Accordingly, Claim 8 does not cover telephones, radio, or microwave or wireless transmissions that produce solely audible results.³⁸ Although they are to be commended for being more careful in their reading of the actual language in Morse’s patent, these scholars still accept Chief Justice Taney’s characterization of the unlimited breadth of Claim 8, even in these admittedly more limited terms. Thus, they maintain that Morse’s patent

³⁴ ROBERT P. MERGES & PATRICK F. DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 113 (6th ed. 2013) (emphasis added). *See also* Tun-Jen Chiang, *Defining Patent Scope by the Novelty of the Idea*, 89 WASH. U. L. REV. 1211, 1252 (2012) (“Samuel Morse did not invent the idea of using electric current in telegraphs, and his claim to that was denied.”); N. Scott Pierce, *A Great Invisible Crashing: The Rise and Fall of Patent Eligibility Through Mayo v. Prometheus*, 23 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 186, 222 (2012) (“Morse . . . claimed the exclusive use of communication at a distance by ‘electric or galvanic current,’ regardless of the means.”); Nicholas Robinson, *Patenting the Tax Code: Monopolizing Basic Tax Strategy*, 5 BUFF. INTELL. PROP. L.J. 50, 62 (2007) (stating that Morse’s patent would “have granted him a monopoly on virtually all electronic communication”); Neeraj Arora, *Disabling Patentability for Skill-Based Inventions: Aligning Patent Law with Competition Policy*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 40 (2005). (“The eighth claim of his patent claimed any use of electro-magnetism to communicate over long distances.”); Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 851 (1990) (“In essence, Morse declared ownership of all methods of communicating at a distance using electromagnetic waves.”); Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 320 (1988) (stating that the Supreme Court rejected Morse’s attempt to “monopolize the general idea of using galvanic current for long-distance communications”).

³⁵ Jay Dratler, Jr., *Alice in Wonderland Meets the U.S. Patent System*, 38 AKRON L. REV. 299, 321 (2005). *See also* Krysta Kauble, *Patenting Everything Under the Sun: Invoking the First Amendment to Limit the Use of Gene Patents*, 58 UCLA L. REV. 1123, 1167 (2011) (“In effect, awarding Morse a patent over electromagnetic waves could have stalled any innovation based on the telegraph for twenty years, possibly delaying the invention of the telephone, cellular telephone, text messaging and so on—unless Morse altruistically granted other scientists the ability to research electromagnetic waves.”).

³⁶ Christina Bohannan & Herbert Hovenkamp, *IP and Antitrust: Reformation and Harm*, 51 B.C. L. REV. 905, 954 (2010).

³⁷ Reissue Patent No. 117, Claim 8.

³⁸ *See* ROBERT P. MERGES & PATRICK F. DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 87-88 (6th ed. 2013) (quoting selected language from Claim 8).

would have covered fax machines, email, text messages, and other forms of modern-day electronic communications that produce written results.³⁹

Both of these claims about the scope of Morse’s Claim 8—that it covers all electronic communications or that it covers all electronic communications that produce written results—are profoundly mistaken, but given that scholars and judges are reading only Chief Justice Taney’s *Morse* opinion, it is entirely understandable. In *Morse*, Chief Justice Taney appears to be applying a basic policy in patent jurisprudence that animates all patent doctrines: an inventor cannot claim patent protection for something that he has not invented.⁴⁰ From the inception of the unique American patent system, this has been a key legal requirement that distinguished property rights in novel inventions from monopoly grants in commercial enterprises.⁴¹ Thus,

³⁹ See, e.g., Sean B. Seymore, *The Teaching Function of Patents*, 85 NOTRE DAME L. REV. 621, 660 (2010) (asserting that “text messaging . . . clearly falls within the scope of Morse’s claim”); Michael Risch, *A Surprisingly Useful Requirement*, 19 GEO. MASON L. REV. 57, 104 (2011) (stating that Morse “claimed all forms of printed communication by any electromagnetic signal”); Jacob A. Schroeder, *Written Description: Protecting the Quid Pro Quo Since 1793*, 21 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 63, 73 (2010) (“In *O’Reilly*, after Samuel Morse invented the telegraph, he attempted to claim the exclusive right not only to his own invention, but to all devices using electricity to print characters at a distance. This was, in fact, the scope of claim 8 of his patent.”); William M. Schuster, *Predictability and Patentable Processes: The Federal Circuit’s In Re Bilski Decision and its Effect on the Incentive to Invent*, 11 COLUM. SCI. & TECH. L. REV. 1, 6 (2009) (“[A]ny future invention that used electromagnetism to communicate characters or symbols would fall within the ambit of Morse’s eighth claim.”); Shawn McDonald, *Patenting Floppy Disks, or How the Federal Circuit’s Acquiescence has Filled the Void Left by Legislative Inaction*, 3 VA. J.L. & TECH. 9, Section IV (1998) (“Yet, because a fax machine electro-magnetically transmits text over a distance it would infringe Morse’s claim 8.”); Pamela Samuelson, *Benson Revisited: The Case Against Patent Protection for Algorithms and Other Computer Program-Related Inventions*, 39 EMORY L.J. 1025, 1154 (1990) (“His famous eighth claim was for all uses of electromagnetism to communicate intelligible characters at a distance.”). See also *CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc) (Newman, J., concurring in part and dissenting in part) (stating that “Samuel Morse’s broadest claim was rejected for undue breadth because it was directed to ‘the use of the motive power of the electric or galvanic current . . . for making or printing intelligible characters, letters or signs, at any distances’” (quoting *Morse*, 56 U.S. at 86)).

⁴⁰ See *Bedford v. Hunt*, 3 F. Cas. 37, 37 (C.C.D. Mass. 1817) (No. 1,217) (Story, Circuit Justice) (“No person is entitled to a patent under the act of congress unless he has invented some new and useful art, machine, manufacture, or composition of matter, not known or used before.”).

⁴¹ See, e.g., *Birdsall v. McDonald*, 3 F. Cas. 441, 444 (C.C.D. Ohio 1874) (No. 1,434) (Swayne, Circuit Justice) (“Inventors are a meritorious class of men. They are not monopolists in the odious sense of that term. They take nothing from the public. They contribute largely to its wealth and comfort. Patent laws are founded on the policy of giving to them remuneration for the fruits, enjoyed by others, of their labor and their genius. Their patents are their title deeds, and they should be construed in a fair and liberal spirit, to accomplish the purpose of the laws under which they are issued.”); *Allen v. Hunter*, 1 F. Cas. 476, 477 (C.C.D. Ohio 1855) (No. 225) (McLean, Circuit Justice) (“Patentees are not monopolists. . . . No exclusive right can be granted for anything which the patentee has not invented or discovered. . . . [T]he law repudiates a monopoly. The right of the patentee entirely rests on his invention or discovery of that which is useful. And which was not known before. And the law gives him the exclusive use of the thing invented or discovered, for a few years, as a compensation for ‘his ingenuity, labor, and expense in producing it.’”); *Ames v. Howard*, 1 F. Cas. 755, 756 (C.C.D. Mass. 1833) (No. 326) (Story, Circuit Justice) (“Patents for invention are not to be treated as mere monopolies odious in the eyes of the law, and therefore

when Chief Justice Taney decries that Morse is using a “too broad” claim in his patent that “shuts the door against inventions of other persons,”⁴² he is legitimately invoking a core policy in American patent law from its beginnings in 1790.

It appears, though, that this is what Chief Justice Taney is doing only because of his laser-like focus on Claim 8 in isolation from Morse’s other seven claims in his patent. This is the method of asserting and interpreting claims today in patent infringement cases, and this is why Chief Justice Taney’s *Morse* opinion appears to our modern eyes to be a legitimate exercise in the proper judicial construction of a patent asserted against an infringer. But this is an entirely modern interpretative methodology predicated on the development in the late nineteenth and early twentieth centuries of what is now called *peripheral claiming*, in which patentees use claims to define the specific legal boundaries of their property right.⁴³ As such, patent owners now assert that defendants violated their property rights by identifying the specific point on the boundary of the claimed invention that was “trespassed” by the infringer.⁴⁴ Thus, the basic methodological approach in construing specific patent claims in patent infringement cases today presupposes the practice of peripheral claiming, and as a corollary the distinction in substantive legal doctrines between literal and equivalent infringement.

But these substantive and methodological doctrines and practices did not exist yet, because this is not how claims were defined, written or interpreted in the Antebellum Era, a point well known by Morse, by patent lawyers, and, even more important, by Chief Justice Taney. This was a time when inventors, lawyers and judges viewed the function of a patent as securing

not to be favored; nor are they to be construed with the utmost rigor, as strictissimi juris. . . . Hence it has always been the course of the American courts . . . to construe these patents fairly and liberally, and not to subject them to any over-nice and critical refinements.”). *See generally* Adam Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 16.

⁴² *Morse*, 56 U.S. at 113.

⁴³ *See* Adam Mossoff, *The Trespass Fallacy in Patent Law*, 65 FLORIDA L. REV. 1687, 1693 (2013) (identifying this development and of the judicial practice of referring to patent claims as setting forth the “metes and bounds” of the property right).

⁴⁴ *Id.* (referring to the use of the “trespass” concept in patent infringement cases).

“the principle” of an invention,⁴⁵ a practice that continued even after claims were first mandated in the Patent Act of 1836.⁴⁶ Morse was no exception,⁴⁷ and the extensive deposition transcripts in his patent infringement lawsuit further evidence this basic legal fact of patent practice in the nineteenth century.⁴⁸ Accordingly, patent owners did not assert that infringers literally violated a

⁴⁵ See, e.g., Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119 (repealed 1870) (“But before an inventor shall receive a patent for any such new invention or discovery, he shall deliver a written description of his invention or discovery, . . . [in which] he shall full explain *the principle* and the several modes in which he has contemplated the application of *that principle* or character by which it may be distinguished from other inventions”) (emphases added); *Blanchard v. Beers*, 3 F. Cas. 617, 617-18 (C.C.D. Conn. 1852) (No. 1506) (instructing a jury that “in his specification, the patentee explains the principle embodied in his machine, in other words, the novel characteristics or inventive elements of the machine”); *Barrett v. Hall*, 2 F. Cas. 914, 923 (C.C.D. Mass. 1818) (No. 1,047) (Story, Circuit Justice) (“In the minds of some men, a principle means an elementary truth, or power; No one, however, in the least acquainted with law, would for a moment contend, that a principle in this sense is the subject of a patent The true legal meaning of the principle of a machine, with reference to the patent act, is the peculiar structure or constituent parts of such machine.”); *Whittemore v. Cutter*, 29 F. Cas. 1123, 1124 (C.C.D. Mass. 1813) (No. 17,601) (Story, Circuit Justice) (“By the principles of a machine, (as these words are used in the statute) is not meant the original elementary principles of motion, which philosophy and science have discovered, but the *modus operandi*, the peculiar device or manner of producing any given effect.”); U.S. Patent No. X1865 (granted Jan. 12, 1813) (“The characteristic principle is . . . that temper given to steel for a proper spring.”). See also Michael Risch, *America’s First Patents*, 64 FLORIDA L. REV. 1279, 1296 (2012) (“Most early cases stating that ‘principles’ are not patentable were not patentable subject matter opinions; instead, they were attempts to determine what the patent covered.”).

⁴⁶ See Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119 (repealed 1870) (requiring that the inventor “shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention and discovery”); *Brooks v. Jenkins*, 4 F. Cas. 275, 281-82 (C.C.D. Ohio 1844) (No. 1,953) (McLean, Circuit Justice) (“Whether a machine be large in its parts or small, its motion slow or quick, makes no difference in the principle of it The word principle is not used here in its general signification, but as applied to the structure of a machine. It means the operative cause by which a certain effect is produced.”); *Winans v. Denmead*, 56 U.S. (15 How.) 330, 331 (1854) (quoting from the 1847 patent that “The principle of my invention . . . consists in . . .”).

⁴⁷ See, e.g., Reissue Patent No. 79 (issued Jan. 15, 1846) (stating that this patent provides “a full, clear, and exact description of the principle or character” of the “invention I denominate the American Electro-Magnetic Telegraph”).

⁴⁸ The lengthy sixty-question interrogatories submitted by Morse’s attorneys asked such questions as whether “the essential principles of the instrument of [defendant] are the same as those of Morse’s instrument” (Question 26) and whether “the two instruments produce the same or different results upon the same or different principles” (Question 27). See Case Record, *O’Reilly v. Morse*, at 171. Similarly, O’Reilly defended himself with witnesses who testified as to how his infringing telegraph was “essentially different” from that of Morse’s telegraph. Deposition of Edmund F. Barnes, Case Record, *O’Reilly v. Morse*, at 365. See also Deposition of Samuel K. Zook, Case Record, *O’Reilly v. Morse*, at 376 (“I believe myself to be perfectly familiar with the operations of each [telegraph], and the principles governing them, and from I know of the two, I believe them to differ essentially.”).

In response, the witnesses’ testimony consistently reflect this norm of patent practice in the Antebellum Era. See Deposition of Andrew Prosch, *O’Reilly v. Morse*, Case Record, at 223 (stating that the defendants’ telegraph works “for the same purpose, producing the same effect” as Morse’s telegraph); Deposition of James Foss, *O’Reilly v. Morse*, Case Record, at 238 (“I unhesitatingly express the opinion that the essential principles involved in the instrument of Barnes & Zook, are the same as in those of Professor Morse. . . . They produce the same results upon the same principles, and not different.”); *Id.* at 240 (“The same form is used, the same result is produced, the same general process employed.”); Deposition of Charles Chester, *O’Reilly v. Morse*, Case Record, at 245 (“There is no difference in the nature of Barnes & Zook’s instruments from those of Morse. The essential principles of the two producing the same result, altho [sic] there is a slight difference in the mechanical structure, but none of which changes the nature and principles of Morse’s instruments.”). See also *infra* notes 218-221 and accompanying text (identifying same).

specific claim in a patent,⁴⁹ and patent infringement cases read like what patent lawyers know today as equivalents infringement.⁵⁰

To expose the *Morse* myth, we thus have to review the invention, commercialization and litigation of his Morse's patented innovation in the electro-magnetic telegraph. In short, the conventional wisdom about Morse's patent today is rooted solely in Chief Justice Taney's anachronistic interpretation of Claim 8. In this full historical context it is possible to recognize that it is only by a lucky historical accident through the later evolution of both the structure of patents and patent infringement doctrines that Chief Justice Taney's *Morse* opinion today is viewed approvingly by judges, lawyers and scholars.

III. THE INVENTION OF THE ELECTRO-MAGNETIC TELEGRAPH

Before detailing the litigation between Morse and O'Reilly, and its ultimate resolution in Chief Justice Taney's opinion in 1854, it is first necessary to summarize the invention by Morse of the first practical electro-magnetic telegraph. In many respects, the story of Morse's invention of the electro-magnetic telegraph is similar to the circumstances surrounding many inventions of innovative technologies in nineteenth-century America. The need for more effective and efficient communication over vast distances had long been a vexing problem in business, politics and war, because for much of human history the speed of communication was directly linked with the

⁴⁹ For example, in his Bill of Complaint, Morse does not identify a single one of the eight claims in his patent as having been violated by O'Reilly, stating only that O'Reilly and the other defendants "use and employ instruments, apparatus, and means, which are in the material, substantial, and essential parts thereof, like to and upon the principle and plan of the said several improvements so patented by our orator, Morse . . . All of which is in violation of the said several letters patent, and of the specifications thereto annexed, or of some part thereof." Bill of Complaint, Case Record, *O'Reilly v. Morse*, at 11.

⁵⁰ See, e.g., *Foster v. Moore*, 9 F. Cas. 563, 567-68 (C.C.D. Mass. 1852) (No. 4,978) (Curtis, Circuit Justice) (stating that the "substance of this invention" secured to the patentee is not restricted to "the identical devices he employed, but by all other known substitutes," but that the witnesses in this case failed to explain the "principle" that is either shared or contrasted between the patent and the allegedly infringing device); *Barrett v. Hall*, 2 F. Cas. 914, 923 (C.C.D. Mass. 1818) (No. 1,047) (Story, Circuit Justice) ("Now, the principles of two machines may be the same, although the form or proportions may be different. They may substantially employ the same power in the same way, though the external mechanism be apparently different.").

speed of human transportation.⁵¹ Letters traveled only as fast as sailing ships on sea or by horseback on land, resulting in such things as unnecessary battles occurring after peace treaties had been signed, such as the Battle of New Orleans in 1815.⁵²

As with sewing,⁵³ manufacturing of mass quantities of goods,⁵⁴ and numerous other basic commodities of life, the Industrial Revolution inspired people to begin working on a mechanized solution to the longstanding problem of fast and effective telecommunication.⁵⁵ Just as with these other inventions, it was not an easy problem to solve; Joseph Henry, the famous early American physicist, explained in letter to Morse in 1842 that many people had long been working on the “idea of transmitting intelligence to a distance by means of electrical action . . . but . . . all attempts to reduce it to practice were necessarily unsuccessful.”⁵⁶ Still, Henry was a typically optimistic American who saw new opportunities in recent discoveries in electro-magnetism, including some of his own path-breaking research in this field,⁵⁷ and so he concluded in his message to Morse that “science is now fully ripe for this application, and I have not the least doubt, if proper means be afforded, of the perfect success of [your] invention.”⁵⁸

⁵¹ See HOWE, *supra* note 4, at 1 (“For thousands of years messages had been limited by the speed with which messengers could travel and the distance at which eyes could see signals such as flags or smoke.”); SILVERMAN, *supra* note 3, at 147 (“The identity of communication with transportation had existed for millennia.”).

⁵² This battle was fought after the Americans and British had signed the truce that officially brought an end to the War of 1812. See HOWE, *supra* note 4, at 15-16.

⁵³ See Adam Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s*, 53 ARIZ. L. REV. 165, 171-82 (2011) (detailing the invention of the sewing machine).

⁵⁴ See EVANS, *supra* note 1, at 52-55 (detailing Eli Whitney’s invention of manufacturing of machine-tooled, interchangeable parts, which became known as the “American system” of industrial production).

⁵⁵ See generally LAURENCE TURNBULL, *THE ELECTRO-MAGNETIC TELEGRAPH: WITH AN HISTORICAL ACCOUNT OF ITS RISE, PROGRESS, AND PRESENT CONDITION, ALSO, PRACTICAL SUGGESTIONS IN REGARD TO INSULATION AND PROTECTION FROM THE EFFECTS OF LIGHTENING* (1853) (detailing extensive scientific and inventive work into telegraphs, electricity, electro-magnetism, chemistry and all other telegraph-related fields of art); see also Deposition of Edmund Barnes, *O’Reilly v. Morse*, Case Record, at 369-71 (detailing extensive efforts at electrical and electro-magnetic telecommunication before Morse); JAMES D. REID, *THE TELEGRAPH IN AMERICA: ITS FOUNDERS, PROMOTERS AND NOTED MEN 1-20* (1879) (detailing extensive scientific and inventive investigations into electricity and telegraph systems from eighteenth century until the 1840s).

⁵⁶ Letter of Joseph Henry to Samuel F.B. Morse, Feb. 24, 1842, in *O’Reilly v. Morse*, Case Record, at 324.

⁵⁷ See Joseph Henry, *On a Reciprocating Motion Produced by Magnetic Attraction and Repulsion*, 20 AMERICAN J. SCI. & ARTS 340 (1831); Joseph Henry, *On the Application of the Principle of the Galvanic Multiplier to Electro-Magnetic Apparatus, and also to the Development of Great Magnetic Power in Soft Iron, with a Small Galvanic Instrument*, 19 AMERICAN J. SCI. & ARTS 400 (1830).

⁵⁸ Letter of Joseph Henry to Samuel F.B. Morse, Feb. 24, 1842, Case Record, at 324.

Moreover, just as with the invention of vulcanized rubber,⁵⁹ the repeating firearm,⁶⁰ the mechanized reaper,⁶¹ and other technical marvels of the early nineteenth century, the invention of the first practicable and successful electro-magnetic telegraph came from a wholly unexpected and even unlikely source. Morse was an artist by training and profession.⁶² He was proficient in neither science nor mechanics, although like many early Americans, he was not entirely devoid of interest or skill in technical matters. He and his brother obtained a patent in 1817 for a piston pump for fire engines.⁶³ Yet, the invention of the electro-magnetic telegraph required Morse to explicitly apply novel ideas from science (electricity, magnetism, etc.) and technology (batteries, circuits, etc.) in crafting an entirely novel electro-mechanical communication system.⁶⁴ The result was that, unlike with the inventions of the repeating firearm and the mechanized reaper, among others, Morse relied heavily on assistance from other people, especially those who were trained in mechanics and in science (what was called “natural philosophy” at the time).⁶⁵

During the extensive, multi-year litigation over his patented innovation, Morse would be bedeviled by Henry O’Reilly and others who went to great lengths in mischaracterizing the nature of this assistance to try to invalidate his patents. O’Reilly also relied on outright liars to try to discredit Morse’s claims to having been the first inventor of his electro-magnetic telegraph. In response to these repeated attacks on his patented invention in the courts and in the popular

⁵⁹ See CHARLES SLACK, *NOBLE OBSESSION: CHARLES GOODYEAR, THOMAS HANCOCK, AND THE RACE TO UNLOCK THE GREATEST INDUSTRIAL SECRET OF THE NINETEENTH CENTURY* (2002).

⁶⁰ See EVANS, *supra* note 1, at 61 (describing how Samuel Colt invented the repeating firearm while serving as an apprentice sailor).

⁶¹ See *id.* at 79 (noting how Cyrus McCormick, “[a]t the age of 22, in an isolated little hollow in the Virginian mountains, . . . invented the first practical mechanical reaper”).

⁶² See REID, *supra* note 55, at 29-37 (1879).

⁶³ *Id.* at 33-34.

⁶⁴ See HOCHFELDER, *supra* note 19, at 2-3 (describing challenges in creating the first telegraph system).

⁶⁵ A letter written by one of the passengers on the ocean voyage in 1832 during which Morse conceived of his electro-magnetic telegraph states that “I was, myself, glad [Morse] had gained a scientific reputation which I should not have predicted from any knowledge he seemed to have at the time; and I think he deserves as much credit for the invention as if he had previously made himself master of all the necessary science Without your assistance, or that of others equally accomplished in science, he in all probably would have been unable to proceed . . . but the praise must be his of seeking, wherever he could find it, the science and mechanical skill which previously he had not, and using them in prosecution of his favorite scheme.” Letter from J. Francis Fisher to Charles T. Jackson, June 9, 1847, *O’Reilly v. Morse*, Case Record, at 349.

press over the span of years, Morse eventually overreacted and began improperly downplaying the assistance he received from others. This caused him further grief both in the courts of law and with the very people who assisted him in his inventive labors, such as Professor Henry, with whom Morse had a bitter falling out.

The origin story of Morse’s conception of the electro-magnetic telegraph begins in 1832 with Morse’s return from a long sojourn in Paris, France where he was painting replicas of the famous paintings in the Louvre to showcase back in America. On the ocean voyage back to New York City, where Morse would assume the position of Professor of Art at New York University, he engaged in spirited dinner conversations with the Captain of the ship (*Sully*) and with his fellow travelers about some of the recent discoveries in electricity and its possible impact on communication. During one conversation, Morse had what he later referred to as a “flash of genius,”⁶⁶ in which he excitedly proclaimed to his fellow passengers, “If the presence of electricity can be made visible in any part of the circuit, I see no reason why intelligence may not be transmitted instantaneously by electricity.”⁶⁷ He spent the rest of the voyage speaking with the other passengers about his idea for transmitting information, receiving feedback from some of the more technically adept passengers onboard, and drafting initial sketches of his idea.⁶⁸

Today, there is much skepticism about these claims to a “flash of genius,”⁶⁹ but thanks to Morse’s compulsive letter writing, to his equally compulsive habit of keeping copies of his notes,

⁶⁶ EVANS, *supra* note 1, at 71.

⁶⁷ Letter from Samuel F.B. Morse to Joshua Fisher, Nov. 14, 1837, O’Reilly v. Morse, Case Record, at 344.

⁶⁸ See 2 SAMUEL F.B. MORSE: HIS LETTERS AND JOURNALS 6-8 (Edward Lind Morse ed., 1914) (depicting three sketches from Morse’s notebook from his time on the *Sully*). See also Deposition of R.C. Morse, O’Reilly v. Morse, Case Record, at 255 (“Samuel F.B. Morse, then returning home from a three years residence in Europe . . . informed us that he had made, during his voyage, an important invention which had occupied almost all his attention on ship-board . . . and *showed us his sketchbook* . . . I distinctly recollect my surprise and delight at the announcement of this brilliant invention.”) (emphasis added).

⁶⁹ See, e.g., Jorge Contreras, *Industry Responds to White House Calls for Prior Art, Examiner Training*, PatentlyO Blog (Feb. 27, 2014), at <http://patentlyo.com/patent/2014/02/industry-examiner-training.html> (stating that “the Edisonian conception of the sole inventor has been shown largely to be a myth”). But see Mossoff, *supra* note 53, at 180 n.98 (identifying examples of inventors’ “flash of genius”); ALFRED B. GARRETT, *THE FLASH OF GENIUS* (1963) (providing a compendium of more than fifty accounts of individual acts of invention or discovery).

sketches and other materials relating to his inventive efforts,⁷⁰ and to the numerous depositions filed in the *Morse* litigation, there is substantial corroboration of Morse’s characterization of his initial conception of the electro-magnetic telegraph.⁷¹ The Captain of the *Sully*, for instance, confirms Morse’s account, as consistently reported in both his letters and in legal testimony.⁷² Moreover, Samuel Morse’s brother, Sydney Morse, testified that, upon meeting him at the dock, “my brother communicated to me his plan of an electrical telegraph in November, 1832, while I was walking with him from the ship *Sully* He was full of the subject of the telegraph during the walk from the ship, and for some days afterwards could scarcely speak about anything else.”⁷³ Such reports are significant, because after disembarking from the *Sully* in New York City, Morse primarily focused on his professional commitment as a professor of art at New York University, and thus he worked only furtively and mostly in secret in experiments on the telegraph.⁷⁴ Over the next five years, only a few family members and professional associates knew about Morse’s work on perfecting the electro-magnetic telegraph conceived during the ocean voyage in 1832.⁷⁵

⁷⁰ See *supra* note 68; see also *O’Reilly v. Morse*, Case Record, at 342-45 (submitting into evidence letters between Morse and Joshua Fisher, a passenger on the *Sully*, in which Morse’s claim to inventor is confirmed); *Id.* at 348-49 (submitting into evidence an unsigned and unaddressed letter, dated June 9, 1847, from a passenger on the *Sully*, confirming an exchange of letters with Morse in 1837 and stating that Morse “deserves as much credit for the invention”); *Id.* at 350-51 (submitting into evidence letters from W.C. Rives, dated Mar. 1, 1838 and Sep. 21, 1838, confirming Morse’s conception of the electro-magnetic telegraph on the *Sully*).

⁷¹ See *Morse*, 56 U.S. at 69-71 (repeating Morse’s claim to invention in 1832 and stating “[t]his is the account of the inventor himself; but it is supported by the testimony of disinterested witnesses,” and proceeding to quote from numerous letters to Morse and depositions).

⁷² See Deposition of William W. Pell, *O’Reilly v. Morse*, Case Record, at 294-99 (listing letters between Pell and Morse from 1837 and 1838). For instance, Pell states in a letter to Morse, dated Feb. 1, 1838, that “you only on board of that ship was the originator of the invention.” *Id.* at 297.

⁷³ Deposition of Sydney E. Morse, *O’Reilly v. Morse*, Case Record, at 260.

⁷⁴ See SAMUEL F.B. MORSE, *supra* note 68, at 25 (observing that there is “little or no reference in the letters of those years to his invention, and it was not until the year 1835 that he was able to make any appreciable progress towards the perfection of his telegraphic apparatus.”).

⁷⁵ See Deposition of Robert Rankin, *O’Reilly v. Morse*, Case Record, at 293 (stating “I became acquainted with [Morse’s magnetic telegraph] in the latter part of the year 1835”); Deposition of Sydney E. Morse, Case Record, at 258 (stating that “from 1832 up to 1837, I understood my brother was engaged in maturing his telegraph”). See also Deposition of Mrs. Sarah L. Morse, *O’Reilly v. Morse*, Case Record, at 253 (“I know that, from Dec., 1832 to the year 1837, the mind and attention of Prof. Morse were occupied frequently in preparing and maturing his telegraph plans.”). See also SILVERMAN, *supra* note 3, at 155-56 (“Some of Morse’s colleagues and painting students at New York University later recalled seeing telegraph apparatus in his rooms in 1835-36 . . .”).

As first conceived by Morse and later detailed in his patent, his telegraph used an electrical circuit powered by a battery to turn on and turn off an electro-magnet. By tapping on a handle, the operator of the device opened and closed the circuit, which permitted electricity to flow in controlled bursts from the battery to the electro-magnet, alternately activating and terminating the magnet with this on-and-off flow of electricity. The electro-magnet was attached to an apparatus that included a magnetized armature.

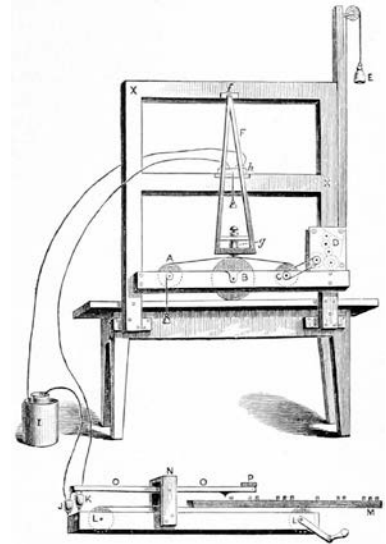


Figure 1: Morse's Telegraph c. 1836

As the electro-magnet was turned on and off, the armature was alternately moved back and forth. As it was moved back and forth, the armature was fitted with a v-shaped tip that made tic marks on a strip of paper that was moved through the device. Morse originally thought the v-shaped tic marks would correspond to numbers that would correspond to words.⁷⁶ He later abandoned this numeric signaling system in favor of the dots and dashes that represented letters instead of whole words—the justly famous “Morse Code” that outlived his original telegraph and which was phased out of military and international maritime communications only in the last decade of the twentieth century.⁷⁷

Morse's initial conception of his electro-magnetic telegraph represented a seminal breakthrough, because, just as with the mechanical typewriter and the sewing machine, it represented an important *conceptual leap*: the recognition that machine motion cannot replicate human motion in performing the same activity.⁷⁸ Other telegraph systems invented around the same time as Morse's telegraph made similar types of conceptual leaps, but they ultimately failed because they did not go as far as Morse did in fully embracing the utter simplicity in a

⁷⁶ See REID, *supra* note 55, at 50 (quoting Morse that “I originally proposed to record numerals only, intending to indicate *words and sentences* by numbers”).

⁷⁷ See SILVERMAN, *supra* note 3, at 445.

⁷⁸ See Mossoff, *supra* note 53, at 172-74.

machine operated by a single circuit transmitting a binary code.⁷⁹ Still, Morse’s formal lack of training in either mechanics or the burgeoning scientific fields of physics and chemistry, all of which informed the making and using of batteries and of electrical circuits, prevented him from making much progress in his secret experiments between 1832 and 1837.

What prompted Morse to go public with his invention was a sudden flurry of news stories in 1837 about telegraph systems being investigated or recently invented in Europe, such as a telegraph system invented by two Frenchmen and reported on in the *New York Observer* on April 15, 1837.⁸⁰ Morse immediately realized he needed to stake a claim publicly to the invention of the electro-magnetic telegraph, although he was also probably driven by his chauvinism and deep-seated bigotries against foreigners.⁸¹ Morse immediately had a news story planted by his brother, Sydney Morse, in the *New York Observer*, entitled, “Newly invented telegraph,” that claimed that “a gentleman of our acquaintance” had invented a telegraph prior to the others now being reported on.⁸² Morse also immediately began writing letters to gather materials corroborating his claim to first invention in preparing for filing a patent application, such as contacting the people on the *Sully* with whom Morse had engaged in substantial discussions

⁷⁹ See *Galvanic Telegraph*, NEW YORK OBSERVER, Oct. 28, 1837 (referring to the English inventor Wheatstone as “Professor Winston” and detailing his elaborate circuitry and recording system and concluding that the “most perfect code of signals, beyond question, is that of Professor Morse, of this city”); See TOM STANDAGE, THE VICTORIAN INTERNET: THE REMARKABLE STORY OF THE TELEGRAPH AND THE NINETEENTH CENTURY’S ON-LINE PIONEERS 36 (1998) (depicting illustration of complicated William Fothergill Cooke and Charles Wheatstone’s telegraph).

⁸⁰ See SILVERMAN, *supra* note 3, at 147-52 (discussing inventive work in France by Gonon and Servat and by others, such as William Alexander in Scotland); see also STANDAGE, *supra* note 79, at 30-40 (detailing work of Wheatstone and Cooke in England).

⁸¹ Morse was a “nativist” who harbored extreme religious, racial and national prejudices. He referred to Abolitionists as “demons in human shape.” SILVERMAN, *supra* note 3, at 256. He was a member of the Native American Democratic Association as well as the Know Nothing Party, and even repeatedly ran for local political office under the banner of these parties. *Id.* at 202-07.

⁸² Deposition of Sydney E. Morse, Case Record, at 259-60 (reprinting article from *New York Observer*, “Newly Invented Telegraph,” first published in 1837).

about his ideas back in 1832, including even Captain William Pell.⁸³ These letters would become invaluable resources in Morse’s future litigation against O’Reilly.⁸⁴

Morse also began in 1837 the formal legal process of legally securing his invention under the patent system. On September 28, 1837, he filed a “caveat” with the Patent Office,⁸⁵ an early legal device for establishing one’s right to a patent by detailing some of the relevant information about one’s claim to being a first inventor.⁸⁶ Morse’s caveat is also notable because it is the first time he identifies his invention by its soon-to-be-famous name: the “American Electro-Magnetic Telegraph.”⁸⁷ Soon thereafter, he filed his formal patent application on October 3, 1837,⁸⁸ and after some delays caused by both Morse and the Patent Office, his first of many patents on the electro-magnetic telegraph would eventually issue on June 20, 1840.⁸⁹

Morse’s public debut in 1837 produced numerous consequences for him and his telegraph over the coming years, some salutary and some deleterious. One unfortunate consequence was that Morse was subjected to the torments of Dr. Charles T. Jackson, who was a fellow passenger on the *Sully* in 1832 and who began to publish newspaper stories accusing Morse of stealing his idea for the electro-magnetic telegraph.⁹⁰ Jackson, a geologist, was no stranger to such controversies, and it these controversies for which he is mostly known today. His first was his public and legal battle with Morse that began in 1837, and several years later he battled again

⁸³ SILVERMAN, *supra* note 3, at 152-53.

⁸⁴ See, e.g., Deposition of William W. Pell, O’Reilly v. Morse, Case Record, at 294-99 (listing letters between Pell and Morse from 1837 and 1838). For instance, Pell states in a letter to Morse, dated Feb. 1, 1838, that “you only on board of that ship was the originator of the invention.” *Id.* at 297.

⁸⁵ See Caveat, O’Reilly v. Morse Case Record, at 47-48.

⁸⁶ See Patent Act of 1836, § 12, Ch. 357, 5 Stat. 117 (July 4, 1836). Today, inventors, or at least inventors who are first to file under the American Inventors Act of 2011, may file a “provisional application,” which serves the similar function as the earlier caveats. See 35 U.S.C. § 111(b).

⁸⁷ See Caveat, O’Reilly v. Morse Case Record, at 48; see also SILVERMAN, *supra* note 3, at 159.

⁸⁸ See O’Reilly v. Morse, Case Record, at 48-52.

⁸⁹ See U.S. Patent No. 1,647.

⁹⁰ See *From the Boston Post, January 10, 1839*, NEW YORK OBSERVER, Feb. 2, 1839, in O’Reilly v. Morse, Case Record, at 299 (“We are informed that the invention of the Electro-magnetic Telegraph, which has been claimed by Mr. S.F.B. Morse, of New York, is entirely due to our fellow-citizen, Dr. Charles T. Jackson, who first conceived the idea of such an instrument during his return voyage from Europe in the packet-ship *Sully*, in October, 1832. . . . Dr. Jackson freely communicated to [Morse], and to all the cabin passengers, his various plans for effecting telegraphic communications. Subsequently, Mr. Morse undertook to monopolize the credit of the invention . . .”).

with the surgeon William Thomas Green Morton in challenging the patent on the use of ether as anesthesia.⁹¹ He also had a dispute with a fellow geologist as to who was the first to discover the age of the rock underneath Lake Superior before he was fired by the U.S. Department of the Interior for dereliction of duty, misuse of public funds and other assorted malfeasances.⁹²

Jackson's accusations against Morse, first asserted in a letter to Morse in September 1837,⁹³ set off another flurry of letters and counter-articles by Morse. For the next sixteen years until the final resolution of *O'Reilly v. Morse* in 1854, Jackson would continuously harangue Morse in public and testify against him on behalf of defendants charged with infringing Morse's patents in the many legal cases surrounding the telegraph.⁹⁴ O'Reilly and others repeatedly called upon Jackson to testify because if Jackson's claims were true, then this would be crucial evidence that would invalidate Morse's patents. It would mean that Morse was not the first

⁹¹ U.S. Patent No. 4848 (issued Nov. 12, 1846). Jackson's attorneys published a defense of Jackson's claims in this dispute, *see* JOSEPH L. LORD & HENRY C. LORD, A DEFENCE OF DR. CHARLES JACKSON'S CLAIMS TO THE DISCOVERY OF ETHERIZATION (1848). If in force today, Patent 4848 likely would be invalidate following the Supreme Court's recent decision in *Mayo Collaborative Services v. Prometheus Laboratories*, 132 S. Ct. 1289 (2012). In *Mayo*, the Court held that that a discovery of a relationship between a medical treatment and the human body's natural reaction to this treatment is an unpatentable "law of nature." *See id.* at 1294 (stating that "to transform an unpatentable law of nature into a patent-eligible *application* of such a law, one must do more than simply state the law of nature while adding the words 'apply it'"). Notably, the *Mayo* Court cited *Morse*, *see id.* at 1293, and this holding would arguably cover a patent claiming the application of ether to anesthetize a patient.

⁹² *See* FULL EXPOSURE OF THE CONDUCT OF DR. CHARLES T. JACKSON, LEADING TO HIS DISCHARGE FROM THE GOVERNMENT SERVICE, AND JUSTICE TO MESSRS. FOSTER AND WHITNEY, U.S. GEOLOGISTS (1850) (detailing the accusations against Jackson in publishing both Jackson's formal request for reinstatement as a U.S. Geologist and the response from the two geologists whom Jackson impugned in his attacks on them); *see also* KENNETH SILVERMAN, LIGHTNING MAN: THE ACCURSED LIFE OF SAMUEL F.B. MORSE 315 (2004).

⁹³ There apparently is no extant record of this or other letters Jackson claimed to have written to Morse. In an 1847 patent case, Jackson recounted the content of this and other letters, but he confessed that he could not corroborate his claims because "my letters were destroyed by a fire in my house, in 1845." Deposition of Charles T. Jackson, *O'Reilly v. Morse*, Case Record, at 397. There is independent verification that Jackson did write to Morse in the fall of 1837, because Morse's response letters were submitted into evidence in the 1847 lawsuit. *See* Letter from Samuel F.B. Morse to Charles T. Jackson, Sep. 18, 1837, and Letter from Samuel F.B. Morse to Charles T. Jackson, Dec. 7, 1837 in *O'Reilly v. Morse*, Case Record, at 487-95. But we know next to nothing about the content of these letters except for fact that, given the nature of Morse's response letters, Jackson's letters clearly challenged Morse as the inventor of the electro-magnetic telegraph.

⁹⁴ Morse's contest with Jackson became a lifetime conflict. For instance, when Morse became embroiled in a dispute in the late 1840s with Francis O.J. Smith, one of his business associates to whom was conveyed an ownership stake in his patent, Smith retaliated against Morse by supporting Jackson's claims against Morse. *See* SILVERMAN, *supra* note 3, at 230-32.

inventor of his electro-magnetic telegraph, a fundamental requirement in American patent law from 1790 until 2011.⁹⁵

Among the beneficial effects of Morse's debut in 1837 were that Morse's labors in perfecting his invention would start to bear fruit because he was now put into contact with individuals who could assist him in his efforts. As a Professor of Art at New York University, Morse sought out the advice of one of his fellow academic colleagues, Leonard D. Gale, a professor of chemistry.⁹⁶ Up until 1837, Morse's telegraph worked, but he could not yet transmit further than forty feet. When Morse showed Gale his telegraph, Gale saw that one of Morse's difficulties was that his battery was poorly constructed, and thus it was not providing enough electricity to flow through wires to operate a far-distant electro-magnet.⁹⁷ As opposed to the loosely wrapped copper wire around an iron bar and a single cup of acid, Gale instructed Morse to wrap copper wire several hundred times around the iron bar and to use forty cups of acid.⁹⁸

Gale's advice led to an immediate improvement in the electrical output of the battery, and by September 2, 1837, Morse gave his first public demonstration of his telegraph at New York University, sending a message through a wire 1700 feet long (approximately one-third mile).⁹⁹ This public demonstration in September 1837 so impressed one of Morse's former students, Alfred Vail, that Vail decided to join Morse to assist him in perfecting the telegraph into a commercially viable technology.¹⁰⁰ Vail was skilled in mechanics, and thus Morse's efforts were

⁹⁵ In all the patent statutes enacted since 1790, the U.S. has required that valid patents be awarded to the first inventor (with some qualifications given an inventor's potential procedural or substantive defaults on this right to a patent). [cite patent statutes]. This was changed in the America Invents Act of 2011, which authorized patents to issue to the first person to file for a patent regardless of whether this person was first to invent or not. [cite patent statute]

⁹⁶ See LEONARD D. GALE, *ELEMENTS OF CHEMISTRY* (1835).

⁹⁷ See SILVERMAN, *supra* note 3, at 159-60.

⁹⁸ Gale made these suggestions on the basis of having spoken with Henry and having read some of his published articles on batteries and electromagnetism. See Deposition of Joseph Henry, *O'Reilly v. Morse*, Case Record, at 425 ("With Professor Gale I have been intimately acquainted for several years; he . . . had studied my papers on electro-magnetism, and, as he informed me, had applied them in the arrangement of the apparatus for the construction of Morse's telegraph.").

⁹⁹ See SILVERMAN, *supra* note 3, at 160.

¹⁰⁰ See *id.* at 161.

amplified by the assistance of two individuals who had the practical skills in making batteries and in constructing mechanical devices. Vail also brought the lucky fortune of family money to the venture, paying for the ongoing construction of telegraph models, as well as the running of experiments and public demonstrations.¹⁰¹

It is important not to misconstrue the nature of the assistance provided to Morse by Gale and Vail. The original ideas that made the electro-magnetic telegraph an innovative technological achievement ultimately secured in a patent and adopted in the marketplace within a decade were born of Morse's indefatigable and inventive efforts. Gale expressly disclaimed providing anything other than merely "aid" to Morse.¹⁰²

Morse also won over Vail's commitment to the telegraph through his inventive labors. Indeed, while Vail was impressed by Morse's September 2, 1837 demonstration, he was still skeptical that an electro-magnetic telegraph could ultimately transmit messages over the long distances required for it to be commercially practicable. There was still not enough electric current being generated by Gale's improved battery to activate an electro-magnet beyond twenty miles. Vail raised his concerns with Morse that an electro-magnetic telegraph that could transmit only twenty miles would not fulfill the demands to communicate tens of thousands of miles across countries and continents. True to style, Morse was undeterred by Vail's skepticism. More proceeded to invent a relay that would amplify the electrical current every twenty miles, making it possible to send signals at any distance around the world. As one biographer of Morse recounts:

This so-called relay was an elegantly simple device It marked a huge, essential advance in the utility of Morse's telegraph, and had many other possible applications. Given his little knowledge of mechanics and electrical science, the

¹⁰¹ See *id.* at 161-63.

¹⁰² See Letter from Samuel F.B. Morse to Charles T. Jackson, Sep. 18, 1837, in *O'Reilly v. Morse*, Case Record, at 489 ("If any one [sic] has a claim to be mutual inventor, on the score of aid by hints, it is Professor Gale, but he prefers no claim of that kind.").

relay seems miraculously ingenious. One historian of technology has called it “a creative engineering achievement of the first order.”¹⁰³

His invention of the relay is what ultimately convinced Vail to join him in bringing to market the electro-magnetic telegraph. Vail was so impressed with Morse’s technological accomplishments that he devoted himself entirely to the telegraph, recounting, “I disided [sic] in my own mind *to sink or swim with it*.”¹⁰⁴

Morse spent the next several years engaged in a variety of projects, including even a brief dalliance with the new daguerreotypes, but he mostly focused on perfecting his telegraph, seeking an appropriation from Congress for a telegraph system, and prosecuting patents in the U.S. and throughout the world. Congress was slow to act in appropriating funds for a telegraph system, and a lengthy trip to Europe to secure protection for his invention in England, France and elsewhere was not as successful as Morse had hoped.¹⁰⁵

During this period, Morse continued to perfect his invention, and he eventually met and corresponded with Joseph Henry about his invention.¹⁰⁶ Joseph Henry was a professor of natural philosophy at Princeton and a renowned American scientist.¹⁰⁷ In addition to his journal publications,¹⁰⁸ he was a committed experimental physicist.¹⁰⁹ At Princeton in 1831, for

¹⁰³ See SILVERMAN, *supra* note 3, at 162. An extensive account of Morse’s invention of the relay is provided in REID, *supra* note 55, at 78-86.

¹⁰⁴ Untitled essay in “Miscellaneous Telegraphy Papers,” Alfred Vail Collection, Smithsonian Institution, *quoted in* SILVERMAN, *supra* note 3, at 163.

¹⁰⁵ He was denied a patent in England, and given the vagaries of the administrative process to which Morse was subjected, he was not entirely unjustified in decrying “this arbitrary act of gross injustice” against him. See Samuel F.B. Morse, *Electric Telegraph—To the Editor*, THE VOICE OF FREEDOM, Mar. 2, 1848, at 3 (identifying the procedural irregularities to which he was subjected in England). Around this same time, Charles Goodyear was also denied an English patent for curing (vulcanizing) rubber, although this was due to an Englishman stealing invention and beating him to filing first at the British Patent Office, as the English system was based on first to file, not first to invent. See CHARLES SLACK, NOBLE OBSESSION: CHARLES GOODYEAR, THOMAS HANCOCK, AND THE RACE TO UNLOCK THE GREATEST INDUSTRIAL SECRET OF THE NINETEENTH CENTURY 127-37, 153-61 (2002).

¹⁰⁶ Morse and Henry accidentally first met in 1837 in New York City, and this led to ongoing meetings, exchange of letters and discussions about “the principles of electricity and magnetism which might be applicable to the telegraph.” See Deposition of Joseph Henry, *O’Reilly v. Morse*, Case Record, at 424-25.

¹⁰⁷ See generally ALBERT E. MOYER, JOSEPH HENRY: THE RISE OF AN AMERICAN SCIENTIST (1997). This is confirmed in statements by some of the scientists who testified in *Morse v. O’Reilly*. See Deposition of Charles B. Moss, *O’Reilly v. Morse*, Case Record, at 459 (“The first philosopher who demonstrated that voltaic electricity could be conducted by the earth, and to use a ground circuit for this kind of electricity, was Dr. Joseph Henry.”).

¹⁰⁸ See *supra* note 57.

instance, Henry had devised an experimental signaling system in which he used an electric current generated by one of his batteries to ring a bell in another campus building.¹¹⁰ At the time, Henry professed admiration in Morse’s inventive achievements:

About the same time as yourself, Professor Wheatstone of London, and Dr. Steinhiel, of Germany, proposed plans of the electro-magnetic telegraph, but these differ as much from yours as the nature of the common principle could well admit; . . . I should prefer the one invented by yourself.¹¹¹

Morse deeply admired this famous American scientist, and thus Henry’s advice and encouragement at this time was a significant source of inspiration to Morse in convincing him that his electro-magnetic telegraph was truly a revolutionary, innovative technology.¹¹²

In 1840, Morse’s first patent issued on the American Electro-Magnetic Telegraph as Patent No. 1647. This patent, which runs many lengthy pages in its description of the invention,¹¹³ concludes with nine specific claims as to what Morse considered to be “my invention.”¹¹⁴ Morse’s claims set forth the novel constitutive elements of his electro-magnetic telegraph, such as among others Morse Code (Claim 3), the handle for alternately activating/deactivating the electrical circuit (Claim 4), and the entire combination of the electro-magnet, the electrical circuit, the recording machinery for “transmitting intelligence by signs and sounds” (Claim 8).

Notably, the now-infamous Claim 8, the focal point of Chief Justice Taney’s *Morse* opinion, did not exist yet. This was later inserted by Morse in a revised version of this first patent

¹⁰⁹ See Deposition of Joseph Henry, *O’Reilly v. Morse*, Case Record, at 427 (stating that he has engaged in “several thousand [experiments] on electricity, magnetism, and electro-magnetism, . . . brief minutes of which fill several hundred folio pages”).

¹¹⁰ MOYER, *supra* note 107, at 68-70.

¹¹¹ Letter of Joseph Henry to Samuel F.B. Morse, Feb. 24, 1842, *in* *O’Reilly v. Morse*, Case Record, at 325.

¹¹² For instance, Henry expressed to Morse in the 1842 letter that he was “pleased to learn that you have again petitioned Congress [for funding] in reference to your telegraph, and I most sincerely hope that you will succeed in convincing our representatives of the importance of the invention.” Letter of Joseph Henry to Samuel F.B. Morse, Feb. 24, 1842, *in* *O’Reilly v. Morse*, Case Record, at 324-25.

¹¹³ In the Case Record, Patent No. 1647 is eleven typewritten pages. See Case Record, *O’Reilly v. Morse*, at 52-64.

¹¹⁴ See *supra* notes 45-50 and accompanying text (discussing Antebellum Era patent law practice of securing “the principle” of an invention in a patent).

(a “reissue patent”).¹¹⁵ But this is not to say that the fatal information was not originally in Patent No. 1647. In the opening paragraph of his 1840 patent, Morse states:

Be it known that I, the undersigned, Samuel F.B. Morse, of the city, county and state of New York, have invented a new and useful machine and system of signs for transmitting intelligence between distant points by means of a new application and effect of electro-magnetism, in producing sounds and signs, or either, and also for recording permanently by the same means, and application, and effect of electro-magnetism any signs thus produced and representing intelligence, transmitted as before named between distant points A, and I denominated the said invention the American Electro-Magnetic Telegraph, of which the following is a full and exact description to wit.¹¹⁶

Moreover, Claim 7 states: “The mode or process of recording or marking permanently signs of intelligence transmitted between distant points, and simultaneously to different points, b the application and use of electro-magnetism or galvanism, as described in the foregoing specification.”¹¹⁷ Such language is the portent of Claim 8, which invokes the ire of Chief Justice Taney more than a decade later, but in the early 1840s, Morse was focused only on obtaining financing for the first wide-scale implementation of his telegraph system. Given his political ideology, he was first seeking this financing from Congress.

As a way to perhaps goad Congress into making an appropriation for a telegraph system based on his invention, Morse continued his public demonstrations, which produced much excitement about it. Morse even teamed up with Samuel Colt in publicly showcasing their respective inventive labors by using electrical signals to remotely detonate charges of gun powder underwater.¹¹⁸ The demonstrations of the telegraph, though, were more than sufficient to create excitement. In 1842, the *New York Herald* proclaimed, “It is destined to work a complete revolution in the mode of transmitting intelligence throughout the civilized world.”¹¹⁹

¹¹⁵ Reissue Patent No. 117 (issued June 13, 1848). This replaced Reissue Patent No. 79 (issued Jan. 15, 1846).

¹¹⁶ Patent No. 1647, *reprinted in* Case Record, O’Reilly v. Morse, at 53.

¹¹⁷ *Id.* at 63.

¹¹⁸ SILVERMAN, *supra* note 3, at 216-16.

¹¹⁹ 2 SAMUEL F.B. MORSE, *supra* note 68, at 183.

In 1843, Morse and his allies in D.C. successfully prevailed over the political vicissitudes that affected Congress even at that time, and Congress voted an appropriation to create a telegraph line between Baltimore and Washington, D.C.¹²⁰ It was on this line that Morse sent his famous transmission on May 24, 1844: “What hath god wrought!”¹²¹ By now, Americans were enraptured with the “Lightning Line” and with the man who invented it, whom they called the “Lightning Man.”¹²² In an oft-repeated characterization of the telegraph, it was said to have “annihilated space and time.”¹²³ The effusive praise for the telegraph continued for years. In 1845, the *Washington Union* proclaimed that it was “the most wonderful climax of American inventive genius.”¹²⁴ A few years later, the *New York Sun* said that this invention was “the greatest revolution of modern times and indeed of all time, for the amelioration of Society.”¹²⁵

IV. THE GREAT TELEGRAPH CASE

All pioneering patented innovation is ultimately the subject of extensive litigation, especially as competitors in the marketplace seek to profit from the unauthorized, free use of the new technology. This incontrovertible fact was recognized by judges as early as 1826,¹²⁶ and it is confirmed by the “patent wars” that have accompanied almost every new major technological leap forward since the early decades of the nineteenth century.¹²⁷ This truth was as equally recognized and widely known in the nineteenth century as it is today.¹²⁸ Morse’s patents on his

¹²⁰ See Reid, *supra* note 55, at 99-102.

¹²¹ See *supra* notes 1-4, and accompanying text.

¹²² SILVERMAN, *supra* note 3, at 240, 244.

¹²³ *Id.* at 240. See also EVANS, *supra* note 1, at 76 (“His telegraph, it was aptly said at the time, annihilated distance and time . . .”).

¹²⁴ WASHINGTON UNION, May 1, 1845, *quoted in* SILVERMAN, *supra* note 3, at 243.

¹²⁵ NEW YORK SUN, Nov. 3, 1847, *quoted in* SILVERMAN, *supra* note 3, at 242.

¹²⁶ See *Thompson v. Haight*, 23 F. Cas. 1040, 1042 (C.C.S.D.N.Y. 1826) (No. 13,957) (“It is unnecessary to look farther than to see the fate of Whitney, Evans, and above all, Fulton, or those who represent him. Instead of deriving peace, honour, and affluence from their incessant labour and incomparable skill, they have sunk under vexation and the pressure of litigation.”).

¹²⁷ See Adam Mossoff & Katharine Jackson, *Top Ten Patent Wars* (surveying patent wars following the invention of the sewing machine, light bulb, telephone, electrical distribution systems, airplane, radio, and others) [draft paper on file with author]. See also Christopher Beachamp, article on NPE litigation involving Goodyear rubber patent and other patents [insert cite to SSRN when posted or to law journal when published].

¹²⁸ See, e.g., *American Muddling Purified Co. v. Christian*, 1 F. Cas. 683, 685 (C.C.D. Minn. 1877) (No. 307) (Miller, Circuit Justice) (“It is a sad thing to say that perhaps no class of cases coming before the courts have as

electro-magnetic telegraph were no exception, and the extensive litigation over his patents that spanned almost a decade eventually came to be widely referred to at the time as “The Great Telegraph Case.”¹²⁹

To understand how the legal case against O’Reilly came to be anointed with this title at the time, it is first necessary to understand how Morse commercially exploited his patented innovation through a variety of sales of his patent rights, licenses, and related complex business arrangements. In fact, Henry O’Reilly was no innocent infringer who just happened to have independently come up with the idea of an electro-magnetic telegraph on his own. O’Reilly was a business man, not an inventor, and he was first brought into the telegraph business by Morse’s business associates as a licensee of the Morse patents. In fact, in a few scant years O’Reilly went from proclaiming that the telegraph should be called the “Morsograph”¹³⁰ and referring to Morse

much fraud, perjury, and wicked conduct, as patent cases. . . . there is a large amount of false swearing and corruption in them.”); *Ambler v. Chouteau*, 1 F. Cas. 589, 589-90 (C.C.E.D. Missouri 1876) (No. 272) (“[I]t does not stand alone in the history of inventions, that the man whose cunning, whose days and nights, are given to the perfecting of the patent, is often swindled out of the proceeds of it, by those more cunning than himself in the ways of the world. . . . Whipple, as I have said, conceiving this to be a very valuable patent, immediately set to work by a confederacy with one Dickerson to swindle Ambler out of it. They pirated from him an improvement on this invention, went to the patent office, made due applications, . . .”); *Blake v. Stafford*, 3 F. Cas. 610, 612 (C.C.D. Conn. 1868) (No. 1,504) (“It is indeed, to be regretted that so great a proportion of the industry and intellectual acumen expended upon patents should be directed to assailing, circumventing or defeating them, rather than to their original construction.”); *Adams v. Jones*, 1 F. Cas. 126, 128 (C.C.W.D. Pa. 1859) (No. 57) (“It is only when some person by, by labor and perseverance, has been successful in perfecting some valuable manufacture, by ingenious improvements, and labor-saving devices, that their parents are sought to be annulled by digging up some useless, rusty, forgotten contrivances of unsuccessful experimenters.”); *Allen v. Hunter*, 1 F. Cas. 476 (C.C.D. Ohio 1855) (No. 225) (McLean, Circuit Justice) (“For the maintenance of his right he is subjected to legal controversies, which, not infrequently involve him in an expenditure beyond the amount of his profits. Inventors and discoverers are proverbially poor. It is said that the man, by the operations of whose genius the streets of the city of London were first lighted, was a wanderer and a beggar in the streets.”); *Blanchard v. Beers*, 3 F. Cas. 617, 617 (C.C.D. Conn. 1852) (No. 1,506) (Nelson, Circuit Justice) (remarking on Blanchard’s patented innovation in wood lathes that “the patent has unfortunately been one of much litigation”).

¹²⁹ See, e.g., *The Great Telegraph Case*, NY OBSERVER & CHRONICLE, Feb. 9, 1854, at 6; SUNBURY AMERICAN, Feb. 4, 1854, at 2 (“The decision of the Supreme Court of the United States in the great telegraph case is rather against professor Morse.”); *Invention of the Electric Telegraph—The Great Telegraph Case in the Supreme Court of the United States*, THE NEW YORK TIMES, Feb. 2, 1853, at 6; NORTH CAROLINA STANDARD, Nov. 8, 1851, at 2 (“The great Telegraph case was decided by the United States Court, in Philadelphia, on the 3d instant.”); *The Great Telegraph Suit*, NY OBSERVER & CHRONICLE, Nov. 6, 1851, at 45. See also SWISHER, *supra* note 13, at 490 (“[District Judge Thomas B. Monroe’s] brother published the opinion in a sixty-five page pamphlet entitled *The Great Telegraph Case*, which he marketed at three dollars a copy.”).

¹³⁰ Letter from Henry O’Reilly to Samuel F.B. Morse, February 4, 1846, *quoted in* SILVERMAN, *supra* note 3, at 265.

and his business associates as “a band of brothers”¹³¹ to proclaiming that Morse is a monopolist who “deserve[s] the ‘piratical’ reputation of plundering other men.”¹³² To understand how O’Reilly went from Morse’s excessively enthusiastic admirer to Morse’s bitter enemy, we must first understand the commercial and legal context that led to Chief Justice Taney’s *Morse* opinion, as this it provides important and necessary insights into understanding the *Morse* myth.

A. *The Commercialization of Morse’s Patented Telegraph*

After the successful use of Morse’s telegraph on the Baltimore-Washington, D.C. line in 1844, Morse became a reluctant capitalist. He repeatedly expressed in letters his feelings of inadequacy in and sometimes dislike for commercial dealings. For instance, in a letter in 1839 to Francis O.J. Smith, he expressed appreciation for the efforts of “an energetic businessman like yourself,” because, “for poor me I feel that I am a child in business matters.”¹³³ His first passion in life was to be an artist, a profession he actively pursued for decades before his fateful ocean journey in 1832. Although his involvement in the business deals and extensive legal wrangling over his telegraph meant that he never returned back to painting after the 1830s, he never lost his visceral disdain for such things. Thus, Morse did what many American inventors have done since the early nineteenth century, and he embraced the division of labor in an advanced commercial marketplace by transferring rights in his patents to other people to carry on the necessary affairs of business.¹³⁴

¹³¹ Letter from Henry O’Reilly to Amos Kendall, August 17, 1845, *quoted in* SILVERMAN, *supra* note 3, at 265.

¹³² SILVERMAN, *supra* note 3, at 292 (quoting pamphlet O’Reilly had distributed in response to the lawsuit filed against him in 1848).

¹³³ Letter from Samuel F.B. Morse to F.O.J. Smith, Feb. 2, 1839, *in* 2 SAMUEL F.B. MORSE, *supra* note 68, at 118. He further states in this letter that “I am not a business man and fear every movement which suggests itself to me.” *Id.*

¹³⁴ *See supra* note 12 and accompanying text. In a letter to his brother in 1848, Samuel Morse complained about some of the unforeseen difficulties arising from his choice to remove himself from the commercial exploitation and legal protection of his patent, stating “my matters are all in the hands of agents and I have nothing to do with any of the arrangements.” Letter from Samuel F.B. Morse to Sidney Morse, Nov. 27, 1848, *in* 2 SAMUEL F.B. MORSE *supra* note 68, at 282.

Even before Morse's first patent would issue in 1840, he had entered into several agreements in which he conveyed multiple ownership interests in his imminent patent rights. When Vail began assisting Morse in 1837, for instance, it was not out of altruistic motives by Vail. Morse and Vail executed an agreement that year providing that Vail would construct "at his own proper costs and expense" Morse's telegraph and would pay the costs of applying for foreign patents in exchange for a 25% interest in the U.S. patent and a 50% interest in any foreign patents.¹³⁵ Later in 1837, when Morse began a seven-year campaign in securing congressional funding for a telegraph line, he became acquainted with Francis O.J. Smith, the chairman of the Committee on Commerce that first investigated whether Congress should support Morse's telegraph. Morse was so impressed with Smith's political and commercial abilities, he drew up a new agreement in March 1838 dividing the interests in his patent between Smith, Gale, and himself.¹³⁶

In the Bill of Complaint filed against O'Reilly in the District Court of Kentucky, dated August 14, 1848, the plaintiffs set forth their respective legal interests as co-owners in the patented electro-magnetic telegraph, as follows. Gale owned a one-sixteenth interest pursuant to Morse's agreement in March 1838 to "transfer and convey to one Leonard D. Gale of New York, his heirs and assigns, one undivided sixteenth part of said invention . . . within and without the United States, excepting only in the Republic of Texas."¹³⁷ Smith owned a one-quarter interest, as this same March 1838 agreement provided that Morse "did bargain, sell, and convey to . . .

¹³⁵ See SILVERMAN, *supra* note 3, at 163. Silverman incorrectly claims that the agreement was executed in late 1837, as the Bill of Complaint filed by Morse and his co-owners against O'Reilly identifies the date of the agreement as March 5, 1838. See Bill of Complaint in *Morse v. O'Reilly*, Case Record, at 5.

¹³⁶ See SILVERMAN, *supra* note 3, at 171.

¹³⁷ Bill of Complaint, *Morse et al. v. O'Reilly et al.*, Case Record, 5. In February 1848, prior to the filing of the lawsuit against O'Reilly later that year on August 14, Morse accepted an offer by Gale to "sell, assign, set over and reconvey to [Morse] the said one-sixteenth part of the right, title and interest in the said invention of an electro-magnetic telegraph." Bill of Complaint, *Morse et al. v. O'Reilly et al.*, Case Record, 6. Thus, having assigned back to Morse his undivided interest in the patent, Gale is not listed as a plaintiff in the legal action against O'Reilly in the District Court of Kentucky. See Bill of Complaint, *Morse et al. v. O'Reilly et al.*, Case Record, 1.

Smith, his heirs and assigns, one undivided fourth part of his said first mentioned invention.”¹³⁸

The specific details of Morse’s agreement with Smith were more complicated than the separate agreements with Gale and Vail, as there were further covenants between Morse and Smith that Morse would “execute sufficient deeds of transfer” and provide accountings “for the proceeds of all sales of rights to use said invention,” among other covenants, and thus the Bill of Complaint concludes its summary by stating that “All of which will more fully appear by said instrument, which was recorded in the said Patent Office.”¹³⁹ Finally, Vail’s interest that was first secured in the 1837 agreement was subsequently revised in a conveyance instrument executed between Morse and Vail on September 5, 1844, in which Morse agreed to “sell, assign, set over and convey to . . . Vail, his heirs and assigns, one undivided eighth part of his said invention.”¹⁴⁰

This was the ownership status of Morse’s patents in 1845 when Morse met Amos Kendall, a prominent and successful politician who was a close confidant of President Andrew Jackson, who in turn had appointed Kendall to be Postmaster General.¹⁴¹ Morse found in Kendall a kindred religious spirit, and he found in Kendall’s fervent commitment to Jacksonian Democratic ideology similar political and racist beliefs as well.¹⁴² Kendall was also an adroit businessman and lawyer, and like Morse had some experiences with inventions.¹⁴³ Morse was impressed and in need of these commercial and legal skills, which he both lacked and disliked.¹⁴⁴

¹³⁸ Bill of Complaint, *Morse et al. v. O’Reilly et al.*, Case Record, 5.

¹³⁹ Bill of Complaint, *Morse et al. v. O’Reilly et al.*, Case Record, 5. The recording of assignments in the Patent Office has been a longstanding requirement of the patent statutes going back to 1793. *See* Patent Act of 1836, ch. 357, § 11, 5 Stat. at 121 (requiring an assignment to be “recorded in the Patent Office within three months from the execution thereof”); Patent Act of 1793, § 4, ch. 11, 1 Stat. at 322 (requiring an assignee to “record[] said assignment, in the office of the Secretary of State”). This recordation requirement followed directly from the unique American legal definition of patents as property rights, which meant that they could be alienated to third parties, and thus similar requirements for identifying chain of title and providing constructive notice thereby were adopted for patents from common law real property doctrines. *See* Adam Mossoff, *Commercializing Property Rights in Inventions: Lessons for Modern Patent Theory from Classic Patent Doctrine*, in *COMPETITION POLICY AND PATENT LAW UNDER UNCERTAINTY: REGULATING INNOVATION* 345-76 (Joshua D. Wright & Geoffrey Manne eds., 2011).

¹⁴⁰ Bill of Complaint, *Morse et al. v. O’Reilly et al.*, Case Record, 6.

¹⁴¹ *See* SILVERMAN, *supra* note 3, at 259-60.

¹⁴² *See id.* at 261.

¹⁴³ *See id.*

¹⁴⁴ As recounted in an 1854 newspaper that obviously took some artistic license in its report: “Ten years ago Professor Morse was just erecting the first experimental line of Telegraphs . . . Professor Morse, like all

On July 14, 1845, Morse and Kendall executed a contract in which Morse designated Kendall as his legal agent with control “in as full and complete a manner as I myself could do” for the 75% of the patent rights owned by Vail, Gale and himself.¹⁴⁵ The other 25% interest in the patent owned by Smith remained directly under Smith’s control per his 1838 agreement with Morse. In exchange for Kendall becoming the agent representing the interests of Morse, Vail and Gale, he received a 10% commission on the first \$100,000 in sales of the patent rights and a 50% commission on all sales in excess of this amount.¹⁴⁶ Kendall was as excited about Morse’s technological achievement as so many others, and he saw in it its vast commercial potential. Thus Kendall committed to Morse his “earthly all . . . in this enterprize, for which I have resigned all other business.”¹⁴⁷

Following his 1845 contract with Kendall that effectively divided up control in the commercialization of Morse’s patent between Kendall and Smith, Morse attempted to retire back to a more sedate family and country life.¹⁴⁸ Kendall promised Morse that he would be insulated from the business and legal issues involving his telegraph, writing in a letter that “It is my earnest desire to see you in a condition not to be annoyed and discomforted by the unpleasant incidents which must be encountered in a business so ramified.”¹⁴⁹ After their agreement was executed, Kendall formed the Magnetic Telegraph Company that began both constructing

scientific benefactors, had exhausted his means, and had become as poor as Lazarus, and as lean and hungry-looking as any veritable Calvin Ederson you ever saw. One day . . . Amos Kendal approached him . . . , [and] he gave the dilapidated Postmaster General an interest in his Telegraph patent, which has since made these two shadows of a shade corpulent with wealth.” *Never Despair*, LOUDON FREE PRESS (May 16, 1854), at 1. The exact same article with some additional sentences tacked on to it was also published in a Washington, D.C. newspaper a month before, see *Never Despair*, DAILY EVENING STAR (April 27, 1854), at 1.

¹⁴⁵ Agreement, July 14, 1845, *quoted in* SILVERMAN, *supra* note 3, at 261.

¹⁴⁶ SILVERMAN, *supra* note 3, at 261.

¹⁴⁷ Letter from Amos Kendall to Samuel F.B. Morse, Mar. 18, 1847, *quoted in* SILVERMAN, *supra* note 3, at 261.

¹⁴⁸ In 1848, for instance, Samuel Morse writes to his brother that “I think I may be able to secure my farm, and so have a place to retire to for the evening of my days, but even this may be denied me.” Letter from Samuel F.B. Morse to Sidney Morse, Nov. 27, 1848, *in* 2 SAMUEL F.B. MORSE *supra* note 68, at 282-83. When he was asked to state his occupation in one of the patent infringement lawsuits, Morse answered: “I . . . am at present a farmer.” SILVERMAN, *supra* note 3, at 300.

¹⁴⁹ Letter from Amos Kendal to Samuel F.B. Morse, Mar. 9, 1847, *quoted in* SILVERMAN, *supra* note 3, at 261.

telegraph lines and licensing other individuals and companies to construct telegraph lines throughout the country.¹⁵⁰ One person who received a license was Henry O'Reilly, setting into motion a series of business disputes that prevented Kendall from keeping his promise to Morse of an undisturbed life. In fact, when the commercial and legal dispute with O'Reilly really began in earnest and Kendall and O'Reilly began trading sharp barbs with each other in newspapers,¹⁵¹ Morse complained that “The most annoying part of the matter to me is that, notwithstanding my matters are all in the hands of agents and I have nothing to do with any of the arrangements, I am held up by name to the odium of the public.”¹⁵²

The progenitor of the dispute with O'Reilly rests in the specific details of the agreement entered into on June 13, 1845 between the four owners of Morse's patent (Morse, Vail, Gale and Smith) doing business under the Magnetic Telegraph Company and O'Reilly. This agreement authorized O'Reilly to construct and operate an exclusive electro-magnetic telegraph line to a limited geographic area, permitting him to run a telegraph line on an east-west axis from Philadelphia, Pennsylvania to St. Louis, Missouri (the contract identified intermediate connections to be made by O'Reilly in Harrisburg, Pittsburg, Wheeling and Cincinnati).¹⁵³ The agreement also permitted O'Reilly to make connections running north from the Philadelphia-St. Louis line “to the principal towns on the [great] lakes.”¹⁵⁴ O'Reilly was prohibited from building or operating telegraph lines anywhere else, which was reserved to the patent owners or their

¹⁵⁰ See WILSON, *supra* note 19, at 10 (2000) (“Morse and his partners exploited the patent through the operations of the Magnetic Telegraph Company, but they also licensed the patent for use by other local telegraph companies in other regions of the country.”). The selling and licensing of patent rights was a very common commercial practice in the nineteenth century. See Naomi R. Lamoreaux, Kenneth L. Sokoloff & Dhanoos Sutthiphisal, *Patent Alchemy: The Market for Technology in US History*, 87 BUSINESS HIST. REV. 3 (Spring 2013); Adam Mossoff, *Commercializing Property Rights in Inventions: Lessons for Modern Patent Theory from Classic Patent Doctrine*, in COMPETITION POLICY AND PATENT LAW UNDER UNCERTAINTY: REGULATING INNOVATION 345-76 (Joshua D. Wright & Geoffrey Manne eds., 2011); Adam Mossoff, *A Simple Conveyance Rule for Complex Innovation*, 44 TULSA L. REV. 707, 711-20 (2009).

¹⁵¹ See SILVERMAN, *supra* note 3, at 283 (quoting the numerous epithets exchanged between the warring sides).

¹⁵² Letter from Samuel F.B. Morse to Sidney Morse, Nov. 27, 1848, in 2 SAMUEL F.B. MORSE *supra* note 68, at 282.

¹⁵³ *Contract—Morse, &c., and H. O'Reilly*, Case Record, at 90, 156-57.

¹⁵⁴ *Contract—Morse, &c., and H. O'Reilly*, Case Record, at 90, 156.

authorized licensees. The expressly provided that the patent owners could either construct or license a telegraph “line from Buffalo to connect with the lake towns at Erie” or “a line from New Orleans, to connect the western towns directly with that city.”¹⁵⁵

B. The First Commercial, Legal, and Public Clashes Over the Telegraph

With his authorization to build and operate a telegraph line connecting the Atlantic seaboard with the Mississippi River, O’Reilly embraced with extreme gusto what he called the “Great Enterprise,”¹⁵⁶ and his frenetic business activities were soon the basis for conflicts with Morse’s business partners. Concerned that O’Reilly was not going to meet his contractual obligations in capitalizing his telegraph company and that he was not doing enough to actually set up the telegraph line that he had committed to build and operate,¹⁵⁷ Smith soon came to loggerheads with O’Reilly.¹⁵⁸ In the first of what became many lawsuits over Morse’s patented electro-magnetic telegraph, Kendall and Smith sued O’Reilly in 1847 in the Eastern District of Pennsylvania, alleging a breach of contract and requesting an injunction to prevent O’Reilly from continuing his business operations under the 1845 license agreement.

Despite plaintiffs’ arguments on the strong legal security provided to patent owners,¹⁵⁹ Judge John K. Kane dismissed their complaint for two reasons. First, Judge Kane recognized that

¹⁵⁵ *Contract—Morse, &c., and H. O’Reilly*, Case Record, at 90, 157.

¹⁵⁶ Letter from Henry O’Reilly to Francis O.J. Smith, July 26, 1845, *quoted in* SILVERMAN, *supra* note 3, at 265.

¹⁵⁷ The agreement provided that “O’Reilly undertakes on his part, at his own expense to use his best endeavors to raise capital for the construction of a line of Morse’s Electro-magnetic Telegraph” *Contract—Morse, etc., and H. O’Reilly*, O’Reilly v. Morse, Case Record, at 90. The agreement further stipulated that Morse, Gale, Vail and Smith would not “convey the patent right” to O’Reilly until “said O’Reilly shall have procured a fund sufficient to build a line of one wire from [Philadelphia] to Harrisburg.” *Id.*

¹⁵⁸ In correspondence that reflects the evolving shift from a commercial dispute into a legal dispute, O’Reilly wrote to Smith on October 24, 1846 that he had “several lawyers” who “esteem the contract quite as sacred as the patent,” and they had concluded that O’Reilly had “steadily kept in view from the commencement to the end, that everything which the spirit as well as the letter of the contract contemplated might be faithfully discharged.” Letter from Henry O’Reilly to F.O.J. Smith, Oct. 24, 1846, O’Reilly v. Morse, Case Record, at 92.

¹⁵⁹ Counsel for the complainants argued that “A patentee has a peculiar right to call upon a court of equity for immediate relief when his patent right, during the limited period for which he is entitled to its exclusive benefit, has been invaded by a stranger. So far has this principle been carried that a court will grant an injunction, even though it may doubt the validity of the patent right. *Boulton v. Bull*, 3 Ves. 140; *Harmer v. Plane*, 14 Ves. 136; 6 Ves. 707; 3 P. Wms. 225, in note; *Bonaparte v. Camden & A. R. Co.* [Case No. 1,617].” *Morse et al. v. O’Reilly*, 17 F. Cas. 867, 869 (C.C.E.D. Pa. 1847) (No. 9853).

plaintiffs were seeking an injunction for what was essentially a claim for a breach of contract. As he dryly observed, “I am not aware that such an application [to enforce a forfeiture] has been sustained by a court of equity in any case; and though called on by me, the counsel for complainants have not found one.”¹⁶⁰ Since Kendall and Smith’s dispute with O’Reilly was really a commercial dispute that was related to but not the primary focus of a license agreement under a patent, their legal claim did not justify the remedy of an injunction issued by a federal court sitting in equity.

Second, plaintiffs had argued that given the breach of his promises under the 1845 agreement to properly capitalize his company, O’Reilly was no longer authorized to construct and use Morse’s telegraph system and thus he was committing patent infringement. Again, Judge Kane found this to be unavailing even as a matter of patent law. Plaintiffs were no longer “the proprietors of the patent right,” he explained, because Smith and Kendall already “formally conveyed to Eliphalet Case all their right of construction and using the magnetic telegraph [over the disputed area covered by the agreement with O’Reilly] An injunction cannot be awarded at the instance of a stranger, and a patentee, who has assigned away his interest is nothing more.”¹⁶¹

This first lawsuit enraged O’Reilly, perhaps because he was stung by what he perceived as a betrayal by his “brothers in arms.”¹⁶² With the same boisterous gusto that he displayed in first embracing Morse’s telegraph, O’Reilly now began a concerted and multi-front campaign of commercial and legal harassment of the Magnetic Telegraph Company and its licensees. Feeling emboldened by his court victory on the technical legal issues about the role of an equity court in a breach of contract claim and that Kendall and Smith too soon conveyed the patent rights over

¹⁶⁰ Morse et al. v. O’Reilly, 17 F. Cas. 867, 870 (C.C.E.D. Pa. 1847) (No. 9853).

¹⁶¹ Morse et al. v. O’Reilly, 17 F. Cas. 867, 870 (C.C.E.D. Pa. 1847) (No. 9853).

¹⁶² See *supra* note 131, and accompanying text. Speaking of this first lawsuit against him, O’Reilly wrote in a letter, “Never was a more dastardly attempt of things in the shape of men, to crawl out of a contract.” Letter from Henry O’Reilly to Charles Oslere, Nov. 14, 1846, *quoted in* SILVERMAN, *supra* note 3, at 280.

O'Reilly's territory to Case,¹⁶³ O'Reilly began constructing and operating telegraph lines far beyond the limited geographic scope of his original license agreement.¹⁶⁴ Moreover, O'Reilly also began actively investing in and using electro-magnetic telegraph devices that were now being invented by other people.

One such device was invented and patented in 1846 by Royal House,¹⁶⁵ whom O'Reilly financially supported and from whom O'Reilly received rights in the patent.¹⁶⁶ In response, Morse surrendered his original patent (Patent No. 1647) and sought his first reissue patent on his electro-magnetic telegraph. Morse did this to prevent O'Reilly from exploiting superficial deficiencies in Morse's original patent given O'Reilly's assertions that he could use House's telegraph without liability.¹⁶⁷ As Morse would write in a letter to his brother, he hoped this would "defeat these *would-be* infringers on their own ground."¹⁶⁸

The Patent Office issued to Morse Reissue Patent No. 79 on January 15, 1846. This patent is especially significant because its first claim directly contradicts the *Morse* myth.¹⁶⁹ It is a lengthy paragraph, but given its importance, it deserves to have much of it quoted in full:

Having thus fully described my invention, I wish it to be understood that I do not claim the use of the galvanic current or currents of electricity for the purpose of telegraphic communication; but what I specifically claim as my invention and improvement, is making use of the motive power of magnetism, when developed by the action of such current or currents, as a means of operating or giving motion to machinery which may be used to imprint signals upon paper

¹⁶³ Even Morse recognized that O'Reilly did not win on substantive grounds about his actual legal rights, but on a failure by Smith to seek an injunction in a court of equity: "our application has been *refused* on technical grounds. . . . I am trying to have matters compromised, but do not know if it can be done, and we may have to contest it in law. Our application was in court of equity. A movement of Smith was the cause of all." Letter from Samuel F.B. Morse to Sidney Morse, Feb. 24, 1847, in 2 SAMUEL F.B. MORSE *supra* note 68, at 273.

¹⁶⁴ An 1850 advertisement in Horace Greeley's *New York Tribune*, for instance, proclaimed: "O'REILLY'S TELEGRAPH LINES, connecting with all sections of the United States." NEW YORK TRIBUNE, Nov. 25, 1850, at 2.

¹⁶⁵ See Patent No. 4464 (issued April 18, 1846).

¹⁶⁶ See SILVERMAN, *supra* note 3, at 284.

¹⁶⁷ See Letter from Samuel F.B. Morse to Sidney Morse, Jan. 28, 1847, in 2 SAMUEL F.B. MORSE *supra* note 68, at 271 ("House and his associates are making most strenuous efforts to interfere and embarrass me by playing on the ignorance of the public and the natural timidity of capitalists. I shall probably have to lay the law on him and make an example before my patent is confirmed in the minds of the public. It is the course, I am told, of every substantial patent. It has to undergo the ordeal of one trial in the courts.").

¹⁶⁸ Letter from Samuel F.B. Morse to Sidney Morse, February 24, 1847, *quoted in* SILVERMAN, *supra* note 3, at 285.

¹⁶⁹ See *supra* Part Two.

or other suitable material, or to produce sounds in any desired manner for the purpose of telegraphic communication. . . . I therefore characterize my invention as the first recording or printing telegraph by means of electro-magnetism. There are various known modes of producing motions by electro-magnetism, but none of these have hitherto been applied to actuate or give motion to printing or recording machinery, which is the chief point of my invention and improvement.

This patent, which is in the Supreme Court’s case record for *O’Reilly v. Morse* and thus was before Chief Justice Taney and the other Associate Justices,¹⁷⁰ makes clear that “the principle” of Morse’s patent is *not* the transmission of information by electricity.¹⁷¹ Morse expressly and specifically disclaims this interpretation of his patent: “I do not claim the use of the galvanic current or currents of electricity for the purpose of telegraphic communication.” He knew that this was not a valid claim for him to make, because he was well aware of Professor Henry’s experimental work at Princeton University in the early 1830s in transmitting electricity along great lengths of copper wire that resulted in an electromagnet ringing a bell.¹⁷² Thus, in stating “the principle” of his invention, he writes: “I specifically claim . . . making use of the motive power of magnetism . . . by the action of such [galvanic] current or currents, as means of operating or giving motion to machinery.” In more basic terms: his invention uses electricity to activate an electro-magnet, which then causes an armature on a machine to move, marking a piece of paper with permanent signs. In sum, this is the invention he first conceived of in 1832 and developed into a practicable technology by 1837 when he applied for his patent.¹⁷³

Given its own inherent technical limitations, the House telegraph was ultimately of little commercial value,¹⁷⁴ but O’Reilly was undeterred and in high dudgeon. Sometime in late 1847 or early 1848, he renamed his telegraph company “The People’s Line.”¹⁷⁵ In accord with his new

¹⁷⁰ See *O’Reilly v. Morse*, Case Record, at 64-69.

¹⁷¹ Reissue Patent No. 79, Case Record, at 65.

¹⁷² See MOYER, *supra* note 107, and accompanying text.

¹⁷³ See *supra* notes 67-77, and accompanying text.

¹⁷⁴ See WOLFF, *supra* note 2, at 22; HOCHFELDER, *supra* note 19, at 29.

¹⁷⁵ See Deposition of James F. Foss, *O’Reilly v. Morse*, Case Record, at 231 (“I am personally acquainted with Henry O’Reilly, and with many of those employed by him It was called by them, and known as, the ‘People’s Line’ of telegraph”). See also SILVERMAN, *supra* note 3, at 285.

company name, O'Reilly framed his increasingly acerbic dispute with Morse and his business associates as one of free enterprise versus monopoly control, a theme that worked well for him in a time just following the rise of Jacksonian Democracy.¹⁷⁶ In one of his many public pamphlets, he attacked Morse and his business associates as maintaining a “monopoly” that stood in the way of “Equal Rights to all modes of Telegraphing.”¹⁷⁷ He announced: “We take the *strongest Anti-monopoly ground*.”¹⁷⁸ Such sentiments have long been part of the patent policy debates, and they were soon echoed in newspapers. The *New York Tribune*, for instance, condemned Kendall and Smith for being “desirous to control and make a profitable monopoly” on the telegraph, and it expressed frustration that Morse was “influenced by such trading politicians as Messrs. Kendall and Smith” in their “attempted close monopoly.”¹⁷⁹ The newspapers in Frankfort, Kentucky, were less restrained: They accused Kendall of being a “venomous reptile,” a “demented old man,” and one of “the blood-sucking calves that are hanging on the teats of Morse’s monopoly.”¹⁸⁰

These public attacks on the Morse “monopoly” did not go unanswered. Kendall counterattacked, accusing O'Reilly of “piracy,” a term very much in common currency at the time in referring to infringers of patent rights.¹⁸¹ In equally strong language, Kendall defended Morse’s property rights in his patented innovation:

O'Reilly and his hands have no more right to construct and use Morse’s telegraph on this line than they have to kill the farmers’ horses and hogs along the road. A patent right is as much private property, under the protection of the Constitution and laws of the land, as a farmer’s land, house, and stock. It is as unlawful to violate my patent as to burn my house; and every man who knowingly aids in it,

¹⁷⁶ See WOLFF, *supra* note 2, at 13 (“Early telegraph entrepreneurs knew these [Jacksonian Democrat] antimonopoly principles well—they frequently employed antimonopoly rhetoric in debates in the press and in Congress . . .”).

¹⁷⁷ “The Wired Party’s Song” (printed pamphlet), *quoted in* SILVERMAN, *supra* note 3, at 285-86.

¹⁷⁸ “The Wired Party’s Song” (printed pamphlet), *quoted in* SILVERMAN, *supra* note 3, at 285.

¹⁷⁹ *Justice to American Genius—The Lightening Telegraph—Its Inventors and Monopolizers*, NEW YORK TRIBUNE, Oct. 6, 1848, at 1.

¹⁸⁰ SILVERMAN, *supra* note 3, at 291-92 (unidentified quotations from “Frankfort press”).

¹⁸¹ See WOLFF, *supra* note 2, at 21. On the common use of “piracy” by many Justices and judges, see Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 16, at 993-94 n.193 (collecting numerous cases using this term).

by his money, his labor, or materials, exposes himself to the penalties of the law.¹⁸²

Kendall's threat of legal action against O'Reilly and anyone assisting him, including possibly customers, was unmistakable.

Like O'Reilly, Morse and his business associates had their public supporters, too. In one letter written to the *Louisville Journal*, the author, Tal. P. Shaffner, stated that "The fact that there is not a line in the United States working with any other instrument but Morse's, is evidence of the virtue of their claims [concerning the merits of the invention]."¹⁸³ The letter writer pointed out that not one of the new "fancy telegraphs . . . is now in operation,"¹⁸⁴ including the telegraph being constructed by The People's Line between Louisville and New Orleans. Not to be outdone in inflammatory rhetoric by O'Reilly's supporters, Shaffner concluded: "I cannot believe that the followers of [O'Reilly's] concern are conscious that they are humbugging the people, but I believe that they, in their zeal to injure Prof. Morse and his associates, are effectively humbugged themselves."¹⁸⁵

O'Reilly was not resting on his laurels with his anti-monopoly rhetoric and the fiery exchanges in the public policy debates. Similar to his earlier attempt at using the patented House telegraph (and his later attempt at using another telegraph patented by Alexander Bain¹⁸⁶), O'Reilly claimed that The People's Line would use a new (unpatented) telegraph that was not covered by Morse's patents: The Columbian Telegraph. This telegraph was the work of Edmund

¹⁸² "Circular E.—Morse's Telegraph," O'Reilly v. Morse, Case Record, at 155. Kendall is correct in his claims about the legal status of patents as property rights and that they are protected as such under the Constitution. See Mossoff, *Reevaluating the Patent "Privilege" in Historical Context*, *supra* note 16; Mossoff, *Patents as Constitutional Private Property*, *supra* note 16.

¹⁸³ Letter from Tal. P. Shaffner to Louisville Journal, April 7, 1848, *in* O'Reilly v. Morse, Case Record, at 163-64.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* at 164.

¹⁸⁶ U.S. Patent No. 6837 (issued Oct. 30, 1849).

F. Barnes and Samuel K. Zook,¹⁸⁷ both of whom were also employed by O'Reilly as telegraphers on The People's Line.¹⁸⁸ In early 1848, The People's Line began constructing a new telegraph line using the Columbian Telegraph between Louisville, Kentucky with New Orleans, Louisiana, which reached Nashville, Tennessee by the summer of 1848.¹⁸⁹ O'Reilly was not just attempting to compete commercially against the Magnetic Telegraph Company and its licensees, he was in both action and words calling for another legal contest with Morse and his business associates.¹⁹⁰

C. Morse v. O'Reilly in the District Court of Kentucky

In order to understand Chief Justice Taney's *Morse* opinion in 1854 in its proper context, it is necessary to review some of the details of the original court case that was filed against O'Reilly in the District Court of Kentucky in 1848. It confirms that the allegations about Claim 8 that came to define the entire case in its resolution at the Supreme Court were not raised by O'Reilly in the court proceedings below, although O'Reilly did offer before the District Court an extensive, broadside legal attack against the validity of Morse's patent. Moreover, the court proceedings in *Morse v. O'Reilly* dramatically highlight the significant differences between patent litigation in the Antebellum Era (before peripheral claiming) and patent litigation today. Although it is impossible to review all of the complex factual and legal details of the case, this section will review those facts and legal arguments necessary in order to assess the *Morse* myth.

¹⁸⁷ See Deposition of Samuel K. Zook, *O'Reilly v. Morse*, Case Record, at 378 ("It is proper to say that this 'Columbia Telegraph,' is the joint invention and the joint property of myself and said Barnes, and is called the instrument of Barnes & Zook.").

¹⁸⁸ See Deposition of Edmund F. Barnes, *O'Reilly v. Morse*, Case Record, at 365-67; Deposition of Samuel K. Zook, *O'Reilly v. Morse*, Case Record, at 375-76.

¹⁸⁹ See Deposition of James F. Foss, *O'Reilly v. Morse*, Case Record, at 231 (stating that The People's Line "was built between the first of January and first of May, 1848"); Deposition of Thomas C. McAfee, *O'Reilly v. Morse*, Case Record, at 311 ("In the early part of the year 1848, the deft., H. O'Reilly, constructed a line of telegraph from Louisville, Kentucky, to Nashville, Tennessee . . . This Line of telegraph was called the 'People's Line.'"); Affidavit of Ricahrd H. Woolfolk, *O'Reilly v. Morse*, Case Record, at 475 ("I state that communication was opened on the 'People's line' of telegraph from Louisville to Glasgow on Tuesday, February 22d, 1848.").

¹⁹⁰ In an open letter to Morse published as a pamphlet shortly after the second lawsuit was filed against him in Kentucky, O'Reilly welcomed the coming legal storm, declaring, "The facts . . . will prove whether you or I most thoroughly deserve the 'piratical' reputation of plundering other men." *Letter of HENRY O'RIELLY to Professor MORSE*, quoted in SILVERMAN, *supra* note 3, at 292.

Unlike with their previous legal debacle in Philadelphia in 1846, Kendall was better prepared this time to sue O'Reilly. The construction of The People's Line south from Louisville to Nashville (and with ongoing efforts to reach New Orleans) was prohibited by the express terms of O'Reilly's 1845 license agreement with Morse and his business associates.¹⁹¹ The moment O'Reilly "constructed a line of telegraphic communication from Louisville, in the district of Kentucky,. . . which is now successfully operating in the transmission of intelligence by means of the patented improvements of . . . Morse," Kendall filed a patent infringement lawsuit in the Circuit Court of the District of Kentucky.¹⁹² The Bill of Complaint was filed in early August 1848, and by this time Morse had again surrendered the first Reissue Patent No. 79 and had received Reissue Patent No. 117 on June 13, 1848 (discussed in Part Two).¹⁹³

Perhaps because of the dismissal of the 1846 complain on the technical issues of who owned the patent rights and whether an injunction was a proper remedy given the nature of the legal cause of action, the Bill of Complaint filed in the District Court of Kentucky provides only a very brief statement of O'Reilly's infringing activities. Instead, the Complaint spends many pages recounting in extensive detail the various conveyances establishing that Morse, Vail and Smith are the "joint owners . . . of all rights, titles, and interests" in the patent, as well as summarizes their licensing and other commercial activities.¹⁹⁴ There is no doubt that this is complaint alleges an infringement of a patent by O'Reilly and that it has been brought by the owners of this property right—Morse, Vail and Smith.

¹⁹¹ Having learned their lesson from the failure in suing O'Reilly in 1846, the plaintiffs submitted into evidence in the 1848 lawsuit formal statements by eighteen attorneys who reviewed the terms of the 1845 license agreement with respect to the specific dispute before the court. *See O'Reilly v. Morse*, Case Record, at 158-63. Thirteen of them concluded in a single signed statement that "the right to construct the line to New Orlean, and intermediate points, between that place and Louisville, is expressly reserved to said Morse and his associates." *Id.* at 158. The other attorneys reached the same conclusions in separate statements. *Id.* at 159-63.

¹⁹² Bill of Complaint, Aug. 14, 1848, *in O'Reilly v. Morse*, Case Record, at 9.

¹⁹³ *See supra* notes 22-25 and accompanying text.

¹⁹⁴ Bill of Complaint, Aug. 14, 1848, *in O'Reilly v. Morse*, Case Record, at 7

Consistent with the lack of peripheral claiming practices or doctrines at this time, the plaintiffs do not identify any specific claims allegedly infringed by O'Reilly, and instead merely state in general terms that O'Reilly is infringing the patent.¹⁹⁵ In fact, in addition to the detailed accounts of the conveyances and interests owned in Morse's patent, there are only two other issues about which the Bill of Complaint provides any specificity beyond generalized statements: First, the plaintiffs allege that O'Reilly ratified the validity of Morse's patent, and the Bill of Complaint reproduces an 1846 letter from O'Reilly to Smith in which O'Reilly states that his attorneys "esteem [our] contract quite as sacred as the patent."¹⁹⁶ Thus, plaintiffs allege that O'Reilly is "estopped from making any such pretense" "that the said patented improvements are void."¹⁹⁷ Second, it includes a list of eighteen questions to be submitted to the defendant, demanding to know, among other things, whether O'Reilly and his employees are licensed or not¹⁹⁸ and whether the Columbian Telegraph is similar or not to Morse's patented telegraph.¹⁹⁹ Since the complaint was filed "in chancery,"²⁰⁰ it concludes with a request for both a preliminary and a permanent injunction.²⁰¹

Unlike the Bill of Complaint, O'Reilly's Answer is much more similar to the court papers that are filed in patent cases today. Predictably, O'Reilly denies infringement, because, as asserts, there are significant mechanical differences between the Columbian Telegraph and

¹⁹⁵ See *supra* note 49.

¹⁹⁶ Letter from Henry O'Reilly to F.O.J. Smith, Oct. 24, 1846, O'Reilly v. Morse, Case Record, at 11.

¹⁹⁷ Bill of Complaint, O'Reilly v. Morse, Case Record, at 13.

¹⁹⁸ See, e.g., Bill of Complaint, O'Reilly v. Morse, Case Record, at 15 ("13th. Whether the said defendants, or any of them, have had any license from your orators, or either of them, in the premises?").

¹⁹⁹ See, e.g., Bill of Complaint, O'Reilly v. Morse, Case Record, at 15 ("10th. Whether the said defendants, or some of them, or some one in their behalf, have not worked, used, or put in practice, and are not now working, using, or putting in practice, the said patented improvements of your orator, Morse, or some part or parts of the same, or the essential principles thereof, or some of them; and how such conduct is justified?").

²⁰⁰ Bill of Complaint, O'Reilly v. Morse, Case Record, at 1. This was a time in which the division between courts of law and courts of equity was still a fundamental institutional distinction in almost every American jurisdiction. See JOHN H. LANGBEIN ET AL., HISTORY OF THE COMMON LAW 381–82 (2009) (describing the law–equity distinction in the federal courts).

²⁰¹ See Bill of Complaint, O'Reilly v. Morse, Case Record, at 16. The complaint asks "that the defendants, their workman, servants, and agents, may be restrained, as well by the preliminary and immediate order and injunction, as by the final and perpetual injunction and decree of this honorable court . . . from infringing upon, or violating, or evading [plaintiffs'] rights in the said patented improvements any way whatever . . ." *Id.*

Morse’s patented telegraph.²⁰² Furthermore, O’Reilly argues that Morse’s patent is “null and void” based on the typical slew of counterclaims by defendants; in this case, that Morse is not the first inventor of the telegraph, the electro-magnetic telegraph is not a novel invention, the specification fails to properly describe the invention, the specification fails to teach one skilled in the art about how to make and operate it, that Morse violated the statutory bar by publicly using the telegraph before filing his patent application, and that Morse violated the statutory bar by selling the telegraph before filing his patent application.²⁰³ In an Amended Answer, O’Reilly further specifically alleges that Morse stole his idea for the electro-magnetic telegraph from Dr. Charles Jackson, among several other new claims.²⁰⁴ A preliminary injunction from “The United States of America, to Henry O’Reilly, Eugene L. Whitman, and W.F.B. Hastings” was issued on September 13, 1848,²⁰⁵ and a hearing before Judge Thomas B. Monroe followed soon thereafter.

For purposes of understanding the *Morse* myth, one of the most significant facts about O’Reilly’s court filings, including all of the answers to interrogatories, deposition transcripts, and affidavits, is the complete absence of any argument that Claim 8 of Morse’s patent is invalid because it is too broad of a claim (either framed in terms of a failure of enablement or as an attempted patent of an abstract idea or principle). Although O’Reilly does acknowledge the validity of some inventions by Morse, such as the invention of the binary transmission code,²⁰⁶ there is nothing in any of O’Reilly’s court filings to suggest that this was an issue in active legal dispute in the patent infringement trial in Kentucky. Yet, Chief Justice Taney’s *Morse* opinion is almost entirely dedicated to this sole issue.

²⁰² Answer, O’Reilly v. Morse, Case Record, at 26-27.

²⁰³ Answer, O’Reilly v. Morse, Case Record, at 21-26.

²⁰⁴ Amended Answer, O’Reilly v. Morse, Case Record, at 34-35.

²⁰⁵ See Writ of Injunction, O’Reilly v. Morse, Case Record, at 19-20.

²⁰⁶ Answer, O’Reilly v. Morse, Case Record, at 21. This concession, however, is contradicted by some of O’Reilly’s witnesses. See Deposition of P.D. Myers, O’Reilly v. Morse, Case Record, at 387 (stating that James Swain devised an “alphabet of dots and dashes . . . for purposes of communication” in 1829).

Of course, Chief Justice Taney did not pull it out of thin air, as it was part of the vitriolic public debates in which Morse was attacked for his “monopoly” on the idea of telegraphy. Ironically, the only hint of this issue in the official case record for *O’Reilly v. Morse* is in evidence submitted on behalf of the plaintiffs; specially, affidavits by Gale, now a patent examiner, and Charles Page, Chief Examiner at the Patent Office. As Gale states: “the essence or spirit of the invention patented by Samuel F.B. Morse . . . consist[s] in a principle carried out in practice,” but, he warned, it must be remembered that “the term principle, as used here, cannot be used abstractly, but must be considered in connexion [sic] with a result, an end, or a practical application.”²⁰⁷ Both Gale and Page confirm that they believe that the “patentable principle” in Morse’s invention is the use of an electro-magnet or “inferior electro-magnetic contrivances” to operate machinery (to provide motive power) for the printing of signals.²⁰⁸ This is the “essence of the invention” secured to Morse, and, according to Gale, “is contained in the first and last claims” in Reissue Patent No. 117.²⁰⁹ According to the case record, neither O’Reilly nor his witnesses responded to this in the court proceedings,²¹⁰ but the issue would take front and center in the follow-on satellite litigation in other courts around the country that occurred after the conclusion of the Kentucky case in 1848 and before the Supreme Court heard the appeal in late December 1852.²¹¹

1. *O’Reilly’s Infringement of the “Principle” of Morse’s Patent*

O’Reilly’s argument that the Columbia Telegraph did not infringe Morse’s patented telegraph given certain mechanical differences between the two devices was not an outright false

²⁰⁷ Affidavit of Leonard D. Gale, *O’Reilly v. Morse*, Case Record, at 121.

²⁰⁸ Affidavit of Charles G. Page, *O’Reilly v. Morse*, Case Record, at 127; *see also* Affidavit of Leonard D. Gale, *O’Reilly v. Morse*, Case Record, at 122.

²⁰⁹ Affidavit of Leonard D. Gale, *O’Reilly v. Morse*, Case Record, at 121-22.

²¹⁰ On this point, the official case record for *O’Reilly v. Morse* diverges from the report of the case in the *Federal Cases* reporter. *See Morse v. O’Reilly*, 17 F. Cas. 871 (C.C.D. Ky. 1848) (No. 9,859). Here, it is claimed that one of O’Reilly’s arguments was the Morse “claimed a monopoly of the use of the galvanic current for recording at a distance by machinery, other than specified in his patent,” and that Judge Monroe rejected as “not well grounded” this argument against “the general claim in the main patent of Morse.” *Id.* at 871-72.

²¹¹ *See SWISHER*, *supra* note 13, at 497-98.

assertion. There were basically two differences in mechanical design between the two telegraph systems; accordingly, Zook, one of the Columbia Telegraph’s inventors, testified that “I believe them to differ essentially.”²¹² First, Morse’s telegraph used an electro-magnet that was activated by the on-and-off flow of electric current, but the Columbian Telegraph used two permanent magnets. In the operation of the Columbian Telegraph, the on-and-off flow of electricity instead magnetized the armature, “whereby the said instrument is alternately attracted and repelled by the permanent magnets.”²¹³ Second, Morse’s telegraph used a single main battery to provide current to the electro-magnet, but the Columbian Telegraph used two “local batteries” to effectuate the movement of the armature.²¹⁴ O’Reilly’s witnesses admitted that the system used the same dot-and-dash signals, but they claimed a new “combination” of the dots and dashes from that of Morse’s original binary code.²¹⁵ Again and again, after describing the Columbian Telegraph’s permanent magnets, the two batteries, or both, the witnesses testifying on behalf of O’Reilly concluded that in comparison to Morse’s telegraph the “mode of application of electro-magnetism in the two instruments is essentially distinct.”²¹⁶

Given the Columbia Telegraph’s structural differences from that of Morse’s electro-magnetic telegraph, the plaintiffs’ case was similar to many other patent infringement lawsuits in the Antebellum Era in which they sought to prove that these changes did not represent a novel

²¹² Deposition of Samuel K. Zook, O’Reilly v. Morse, Case Record, at 376.

²¹³ Answer, O’Reilly v. Morse, Case Record, at 26.

²¹⁴ See Deposition of Samuel K. Zook, O’Reilly v. Morse, Case Record, at 377.

²¹⁵ See Deposition of Samuel K. Zook, O’Reilly v. Morse, Case Record, at 379 (“The signals used in both instruments are, in elements, the same dots and lines; but they differ in the Columbia in combination from the combination used by Morse.”).

²¹⁶ Deposition of Charles T. Smith, O’Reilly v. Morse, Case Record, at 383-84. See also Deposition of John C. Cresson, O’Reilly v. Morse, Case Record, at 391 (“I should consider the Columbia Telegraph a distinct instrument from that of Mr. Morse.”); Deposition of George W. Benedict, O’Reilly v. Morse, Case Record, at 404 (“To my mind the two parts of the Columbia telegraph apparatus, namely, the register and the mutator, . . . and the combination of the register and mutator makes, as a whole, in my mind, a very different machine from the combination seen in the united action of Morse’s register and Morse’s receiver magnet.”); Affidavit of Anson Stager, O’Reilly v. Morse, Case Record, at 472 (stating that “the form or structure, as well as the principle or mode of operation, of the said instruments or machines, are substantially and mainly different”).

and nonobvious invention, but instead reflected the same “principle” as the Morse telegraph.²¹⁷ In this respect, the plaintiffs’ evidence reads very much like what patent lawyers today would recognize as a doctrine of equivalents infringement case, not a literal infringement case. Given that there was no peripheral claiming yet, this was not yet a doctrinal distinction that existed yet in patent law; defendants were accused simply of infringement. As one expert testified on behalf of the plaintiffs:

The Barnes & Zook instrument is a direct infringement of the essence of Morse’s patent and invention, as defined in his specification aforesaid, being the same application of the same power to the same end. The same form is used, the same result is produced, the same general process is employed.²¹⁸

Thus, just as O’Reilly’s witnesses stressed the significant differences and advantages achieved by the permanent magnet and the two batteries, the plaintiffs’ experts repeatedly testified that “[t]here are formal differences between the instruments, but [represented] no essential difference or difference in principle.”²¹⁹ One of Morse’s experts, prodigiously named John Locke, defended Morse’s property rights by concluding that “[s]o far as I know anything of Barnes & Zook’s machine, . . . I should not consider it an improvement.”²²⁰ Another expert agreed, stating bluntly: “My opinion is, that [the Columbian Telegraph] substitutes complication

²¹⁷ See *supra* notes 45-50 and accompanying text.

²¹⁸ Deposition of James F. Foss, O’Reilly v. Morse, Case Record, at 241. Patent lawyers will immediately recognize that this language comports exactly with the “triple identity” test (function-way-result) of the doctrine of equivalents. Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 117, 39-40 (1995).

²¹⁹ Deposition of Jacob Walter, O’Reilly v. Morse, Case Record, at 306. See also Deposition of Charles T. Chester, O’Reilly v. Morse, Case Record, at 245 (stating that there is only “a slight difference in the mechanical structure” and that the “essential principles of the two produc[e] the same result”); Deposition of John Torry, O’Reilly v. Morse, Case Record, at 289 (“It will at once be *perceptible*, from the descriptions and drawings of the two instruments, that there is a difference in the arrangement and mechanical structure of Barnes and Zook’s instrument. It however produces the same result as the instrument of Morse, and by the same means, to wit, that of electro-magnetism.”); Deposition of Edward N. Kent, O’Reilly v. Morse, Case Record, at 322 (“[T]he essential principles in Barnes and Zook’s instrument are precisely the same as in Morse’s, and that both produce the same results and upon the same principles; and the essential principles of Morse’s instrument, as patented, is involved in that of Barnes and Zook’s.”).

²²⁰ Deposition of John Locke, O’Reilly v. Morse, Case Record, at 249.

for discovery, and cumbrous and inconvenient motion for improvement.”²²¹ On this issue, Judge Monroe sided entirely with the plaintiffs.²²²

2. *O’Reilly’s Failed Attempt to Invalidate Morse’s Patent for Lack of Novelty*

Much of O’Reilly’s substantive evidence offered in the 1848 hearing before Judge Monroe, though, was dedicated to trying to invalidate Morse’s patent. He ended up ignoring the panoply of arguments about the invalidity of Morse’s patent that he listed in his Answer,²²³ and instead his experts and other witnesses focused on just two interrelated arguments: first, the electro-magnetic telegraph was known in the art by the time Morse entered the field with his inventive contributions, or, second, in the alternative, Morse stole his idea for the electro-magnetic telegraph from Dr. Jackson.

In addition to a lengthy deposition of Dr. Jackson and numerous other witnesses contending that Morse stole his idea from Dr. Jackson,²²⁴ there was extensive testimony on O’Reilly’s assertion that Morse was not the first and true inventor of an electro-magnetic telegraph. On this issue, O’Reilly’s witnesses provided lengthy disquisitions on the history of electricity, magnetism, and recent experiments by the many scientists who were investigating these forces of nature in the first decades of the nineteenth century. But recent history was not all that was offered; for instance, one of the co-inventors of the Columbia Telegraph, Edmund Barnes, decried Morse’s clam to a novel use of magnetism, because the “attractive power of the magnet was known to the ancients, and is mentioned even by Homer, Pythagoras, Aristotle, and

²²¹ Deposition of Jacob Walter, *O’Reilly v. Morse*, Case Record, at 308.

²²² See Decree, *O’Reilly v. Morse*, Case Record, at 43-44. Judge Monroe specifically found that “the defendants have disturbed the complainants in these their exclusive rights. . . . the Columbia telegraph . . . in plan of construction, principle of operation, and in the purpose accomplished by it, [is] substantially the same with the improvement described and specified in the said last mentioned letters patent to the complainant, Morse,” with respect to “the first claim” and “the third thing claimed by him as his invention.” Thus, Monroe did specifically identify Claim 1 and Claim 3 as having been infringed in “principle” by O’Reilly.

²²³ See *supra* note 203 and accompanying text.

²²⁴ See Deposition of Charles T. Jackson, *O’Reilly v. Morse*, Case Record, at 393-401; Deposition of Joseph A. Abbott, Affidavit of Leonard D. Gale, *O’Reilly v. Morse*, Case Record, at 407-11; Deposition of Joseph Tracey, *O’Reilly v. Morse*, Case Record, at 413-14; Deposition of Cyrus Alger, *O’Reilly v. Morse*, Case Record, at 414-15; Deposition of Francis Alger, *O’Reilly v. Morse*, Case Record, at 415-16; Deposition of Horatio Bigelow, *O’Reilly v. Morse*, Case Record, at 416-17.

by Plato and Eurypides The Jews were acquainted with it.”²²⁵ In terms of more recent experimental investigations, Barnes provided extensive quotes from numerous treatises, as well as identified the work of Edward Davy, Sir Humphrey Davy, Professor Moll, and, most importantly, Professor Joseph Henry, among others, as predating and directly anticipating the work of Morse in the 1830s.²²⁶ Other witnesses also pointed to the work of these and other scientists and inventors,²²⁷ including even Ben Franklin’s “brilliant discoveries.”²²⁸

One name that is mentioned most often, though, is that of Professor Henry.²²⁹ As one scientific expert testified on behalf of defendants, “Prof. Morse is indebted . . . to Prof. Henry for his suggestion as to telegraphs . . . for the form of the receiving magnet.”²³⁰ But O’Reilly did not have to rely on second-hand statements about Henry’s contributions to the art of electricity, batteries, circuits and electro-magnetism, as Henry testified in the case on behalf of O’Reilly. Although Morse and Henry had become friends and professional colleagues by the early 1840s, Henry was deeply stung by Vail essentially omitting his name and work entirely from a treatise on the history of telegraphy that Vail published in 1845;²³¹ he was, as he testified, “much

²²⁵ Deposition of Edmund F. Barnes, O’Reilly v. Morse, Case Record, at 363.

²²⁶ Deposition of Edmund F. Barnes, O’Reilly v. Morse, Case Record, at 366-68.

²²⁷ See Deposition of Joseph A. Abbott, O’Reilly v. Morse, Case Record, at 407-09 (discussing the work of William Sturgeon, Professor Moll, and Professor Dana); Deposition of B.A. Gould, Jr., O’Reilly v. Morse, Case Record, at 411-13 (discussing the work of Professors Gauss and Weber, which was published in different scientific journals in Europe in the 1830s); Deposition of Robert Peter, O’Reilly v. Morse, Case Record, at 443-46 (discussing work of Soemmering, Prof. Coxe, Steinheil, Winckler, Ampere, Faraday, Baron de Schilling, Schilling, Gauss and Weber, Davy, Bain, and others); Deposition of Charles B. Moss, O’Reilly v. Morse, Case Record, at 449-69 (discussing work of Le Monnier, Winkler, Steinheil, William Watson, Ben Franklin and others).

²²⁸ Deposition of Charles B. Moss, O’Reilly v. Morse, Case Record, at 451.

²²⁹ See, e.g., Deposition of Joseph A. Abbott, O’Reilly v. Morse, Case Record, at 409 (“Prof. Henry’s very power electro-magnet is described in Silliman’s Journal of Science, vol xix, 1831.”); Deposition of Benjamin Silliman, O’Reilly v. Morse, Case Record, at 386 (stating that before Morse conceived of his invention “the first decisive and satisfactory demonstration of the practicability of producing mechanical effect at a great distance was made by Joseph Henry”); Deposition of Charles B. Moss, O’Reilly v. Morse, Case Record, at 459 (“The first philosopher who demonstrated that voltaic electricity could be conducted by the earth, and to use a ground circuit for this kind of electricity, was Dr. Joseph Henry.”).

²³⁰ Deposition of Charles B. Moss, O’Reilly v. Morse, Case Record, at 468.

²³¹ See ALFRED VAIL, THE AMERICAN ELECTRO-MAGNETIC TELEGRAPH (1845); see MOYER, *supra* note 107, at 240 (“Vail not only exaggerated Morse’s contribution but also omitted Henry’s role—except for inserting a fleeting reference to Moll’s and Henry’s strong electromagnets.”). Despite Morse’s promise to Henry to correct the treatise in a second edition and his other efforts at reconciliation, a further misunderstanding ensued when Henry later saw another copy of the first edition of Vail’s treatise and he mistook it for a second (uncorrected) edition. See MOYER, *supra* note 107, at 260-61.

surprised . . . to find all my published researches relating to the telegraph passed over with little more than [a minor] remark.”²³² This perhaps explains why several of O’Reilly’s witnesses relied on Vail’s treatise in their testimony,²³³ which seems odd if only because Vail’s treatise excessively exaggerates Morse’s status as the discoverer of the scientific insights in glorifying Morse’s invention of the electro-magnetic telegraph.²³⁴ But ensuring that Vail’s treatise was a prominent source relied on by other witnesses testifying on the history of electro-magnetic telegraphy probably served the purpose of rubbing salt in the wound, and thus may have assisted O’Reilly in convincing Henry of the necessity to testify himself.

By the time of the hearing before Judge Monroe, Henry had been appointed as the first Secretary of the new Smithsonian Institution in Washington, D.C., and thus he was no longer a professor of natural philosophy at Princeton.²³⁵ His testimony was coolly precise in recounting the details of the numerous, recent discoveries in electricity, electro-magnetism, and telegraphy, including the work of Wheatstone, the English telegraph inventor whom Henry had assisted in his experimental work with electro-magnetism on a trip abroad in 1837.²³⁶ Wheatstone was the inventor of an electro-magnetic telegraph that the *New York Observer* reported on in 1837, which is what precipitated Morse to go public and to focus on perfecting his own invention.²³⁷ As made clear in his testimony, Henry did not claim to be an inventor, but as the foremost American scientist of the day, he did not minimize his intellectual contributions to the explosive growth in the art of electro-magnetic telegraphy.²³⁸

²³² Deposition of Joseph Henry, O’Reilly v. Morse, Case Record, at 425.

²³³ See, e.g., Deposition of Edmund F. Barnes, O’Reilly v. Morse, Case Record, at 367-68; Deposition of Robert Peter, O’Reilly v. Morse, Case Record, at 443.

²³⁴ See MOYER, *supra* note 110, at 240.

²³⁵ Deposition of Joseph Henry, O’Reilly v. Morse, Case Record, at 417, 421.

²³⁶ See Deposition of Joseph Henry, O’Reilly v. Morse, Case Record, at 422. See also L. SPRAGUE DE CAMP, *THE HEROIC AGE OF AMERICAN INVENTION* 62-64 (1961) (detailing some of the work of Henry, Wheatstone and Faraday in Wheatstone’s laboratory in England)

²³⁷ See *supra* notes 80-82 and accompanying text.

²³⁸ See Deposition of Joseph Henry, O’Reilly v. Morse, Case Record, at 421-22 (“I never myself attempted to reduce these principles to practice, or to apply any of my discoveries to processes in the arts. My whole attention,

After summarizing at great length his and others’ scientific investigations bearing upon and inventive labors in the art of telegraphy, Henry remarked in an oft-quoted statement:

I am not aware that Mr. Morse ever made a single original discovery in electricity, magnetism, or electro-magnetism, application to the invention of the telegraph. I have always considered his merit in combining and applying the discoveries of others in the invention of a particular instrument and process for telegraphic purposes.²³⁹

Although this was technically correct insofar as Morse was not and never pretended to be a scientist, the contrast in tone could not be more pronounced with Henry’s more effusive statements about Morse’s innovative invention six years earlier in 1842.²⁴⁰ This particular statement by Henry was repeated often in the public debates as The Great Telegraph Case continued up through the early 1850s,²⁴¹ although Henry’s qualifying statement in the very next sentence was never included in these recitations: “I have no means of determining how far this invention is original to with himself, or how much is due to those associated with him.”²⁴²

After Henry’s testimony on behalf of O’Reilly, the sting of betrayal was now felt by both men. As he continuously felt the press of O’Reilly’s public and legal attacks, the public attacks of Dr. Jackson, as well as other legal conflicts, Morse would eventually overreact by falsely denying that Henry had assisted him, stating “I am not indebted to him for any discovery in science bearing on the telegraph.”²⁴³ Several years after the conclusion of The Great Telegraph Case in 1854, though, when emotions ran a bit cooler, Morse appeared to have revised his view

exclusive of my duties to the college, was devoted to original scientific investigations, and I left to others application of my discoveries to useful purposes in the arts.”).

²³⁹ Deposition of Joseph Henry, O’Reilly v. Morse, Case Record, at 424.

²⁴⁰ See *supra* notes 111-112 and accompanying text.

²⁴¹ See, e.g., ALEXANDER JONES, HISTORICAL SKETCH OF THE ELECTRICAL TELEGRAPH: INCLUDING ITS RISE AND PROGRESS IN THE UNITED STATES 49 (1852) (quoting Henry’s statement in a book written by an anti-Morse commentator). This monograph is clearly biased against Morse because it alleges that “Morse and his friends claim an exclusive right to navigate the air by electricity, over the whole continent.” *Id.* at 39. Such incorrect hyperbole about Morse’s patent establishes Jones’s bias despite his self-professed claims to neutrality. *Id.* at ix.

²⁴² Deposition of Joseph Henry, O’Reilly v. Morse, Case Record, at 424.

²⁴³ DE CAMP, *supra* note 236, at 70.

of the matter in a somewhat oblique reference to himself in a speech as a “co-laborer . . . in a great benefaction to the World.”²⁴⁴

Despite O’Reilly’s extensive argumentation repeating Dr. Jackson’s longstanding claim to being the first inventor of the electro-magnet telegraph or alleging that the electro-magnetic telegraph was in fact old in the art, Judge Monroe was as unconvinced as he was by O’Reilly’s claim that the Columbian Telegraph was an entirely distinct device that was not covered by Morse’s patent. He found that the original 1840 patent and subsequent reissue patents to have been “a valid and effectual act of the Government.”²⁴⁵ In accord with the finding of infringement, O’Reilly and his business associates were thus permanently enjoined from using the Columbia Telegraph.²⁴⁶ In words that he would perhaps later rue, Vail sent a letter to Morse in late September 1848, congratulating him on their victory against “that pirate O’Reilly . . . upon the glorious issue of the application for injunction,” and exhorting Morse to continue the fight because these “pirates must be followed up and each in their turn nailed to the wall.”²⁴⁷

D. *The Great Telegraph Case Continues: More Commercial, Legal & Public Battles*

[Please note: This section still needs to be developed further.]

For O’Reilly, Judge Monroe’s decision and injunction was a tactical loss, and thus the war against Morse and his patents on the electro-magnetic telegraph continued unabated. O’Reilly even went so far as to file a protest with Congress demanding impeachment of Judge

²⁴⁴ *Id.* at 71. This was a statement made in an 1856 speech by Morse in promoting the efforts of his innovative licensees in building the first transatlantic cable. He further stated in this speech that “[w]hen the historian has made his search, and brought together the facts, if any one connected with a great invention or discovery has attracted to himself the more concentrated regard or honour of mankind, . . . how significant is it that time, and more research bring out other minds, and other names, to divide and share with him the hitherto exclusive honours.” *Id.* The story of the commercial and technological innovation in building the first transatlantic cable is an excellent example of how innovation breeds more dynamic innovation. See JOHN STEEL GORDON, A THREAD ACROSS THE OCEAN: THE HEROIC STORY OF THE TRANSCONTINENTAL CABLE (2002).

²⁴⁵ Decree, *O’Reilly v. Morse*, Case Record, at 43.

²⁴⁶ *Id.* at 42-46.

²⁴⁷ Letter from Alfred Vail to Samuel F.B. Morse, Sep. 21, 1848, in 2 Samuel F.B. Morse, *supra* note 68, at 294-95.

Monroe given his allegations of alleged improprieties in the handling of the case.²⁴⁸ O'Reilly also attempted to evade Judge Monroe's injunction by moving The People's Line telegraph offices out of Kentucky and opening up shop on the other side of the Ohio River. This resulted in criminal contempt proceedings being brought against O'Reilly and his business associates, some of whom were arrested by the U.S. Marshall and were forced to cool their heels in jail.²⁴⁹

Most important, though, was O'Reilly's decision to start using another telegraph that had been recently invented by Alexander Bain. Bain's invention and its adoption by O'Reilly resulted in Morse applying for an entirely new patent, because Bain's telegraph was sufficiently different from Reissue Patent No. 117 in its use of a chemical recording mechanism to mark paper that it did not infringe the patent asserted against O'Reilly in the Kentucky litigation. The technical features of Bain's telegraph were in fact investigated by Morse in the 1830s, but he did not include them in his 1840 patent, because he felt at that time that they were insufficiently practicable to be of much use in telecommunications.²⁵⁰ Morse's new application issued as Patent No. 4453 (issued April 11, 1846), and surrendered shortly thereafter and issued again as Reissue Patent No. 118 (issued June 13, 1848).

The Bain telegraph is important for at least two reasons that relate directly to the *Morse* myth. First, and most important, Morse's decision to apply for and receive an entirely new patent in response to Bain's invention reveals that Claim 8 was neither intended nor understood by Morse or others to cover any and all telecommunications technology resulting in printed characters. Again, it was limited by its own express terms, as recognized by Judge Monroe, to the use of electricity in activating an electro-magnet (or similarly magnetizing a metal) that physically moved a mechanical recording device. In fact, given that it covers the use of

²⁴⁸ SWISHER, *supra* note 13, at 491-92.

²⁴⁹ See O'Reilly v. Morse, Case Record, at 499-530 (records of the contempt proceedings).

²⁵⁰ See *Letter from Prof. Morse*, NEW YORK OBSERVER, Jan. 2, 1847 (discussing his new patent application and explaining how he did not pursue this particular device in his original experiments in 1837 because it "was necessarily complicated" and that "such a plan was impracticable," and referring to a contest in Austria in which his electro-magnetic telegraph beat Bain's telegraph as evidence for this point).

electricity without magnets in transmitting recorded signals, Morse’s Reissue Patent No. 118 contains even stronger statements than those found in Reissue Patent No. 117 in which Morse expressly disclaims the accusation hoisted on him by the *Morse* myth. He writes: “I do not, therefore, claim to be the inventor of telegraphs generally.”²⁵¹ And to be clear about the scope of his claim, he restates this point again: “I do not, therefore, claim to have first applied electricity to telegraphing for the purpose of showing evanescent signs or signals.”²⁵² Again, this is important, because it directly contradicts the central allegation in the *Morse* myth about the scope of Morse’s patents—that Morse was aggrandizing to himself all electrical telecommunications or at least all electrical telecommunications that produce permanent marks. It bears emphasizing that Reissue Patent No. 118 is the case record for *O’Reilly v. Morse*, and thus this was before Chief Justice Taney and the Associate Justices.

Second, the Bain invention resulted in additional litigation for Morse and his business associates. Gale, who was now a patent examiner, rejected Bain’s patent application on the ground that it was already covered by Morse’s new patent.²⁵³ Bain appealed this adverse administrative decision by the Patent Office, and since this lawsuit was deemed to be an Article III equivalent of an interference action in the Patent Office,²⁵⁴ Morse was expressly identified as a defendant in the case, which was officially captioned: *Bain v. Morse*.²⁵⁵ Once more, Kendall was called into action as an attorney to represent Morse and his business associates, and, once more, Morse was required to collect and prepare evidence on his inventive activities reaching back to the 1830s. Joseph Henry was even brought in to testify (again) by Bain’s attorneys.²⁵⁶ In his decision, Judge William Cranch held that both Morse’s and Bain’s respective inventions were

²⁵¹ Reissue Patent No. 118, in *O’Reilly v. Morse*, Case Record, at 81.

²⁵² Reissue Patent No. 118, in *O’Reilly v. Morse*, Case Record, at 81.

²⁵³ See SWISHER, *supra* note 13, at 493.

²⁵⁴ See *Bain v. Morse*, 2 F. Cas. 394, 403-05 (C.C.D.C. 1849) (No. 754).

²⁵⁵ 2 F. Cas. 394 (C.C.D.C. 1849) (No. 754).

²⁵⁶ See SWISHER, *supra* note 13, at 493.

sufficiently distinct in their respective technical details and processes that they did not cover the same invention; thus, there was no interference, and each could reach their respective patents.²⁵⁷

Following the *Bain* decision in 1849, O'Reilly immediately sought a rehearing on the scope of the injunction issued in Kentucky. Judge Monroe agreed to revise his broad injunction for the purpose of expressly excluding the Bain telegraph from its operation.²⁵⁸ At the same time, though, Morse and his business associates filed for another injunction on the basis of Judge Monroe's earlier decision against O'Reilly in Tennessee, Alabama and Louisiana. Justice John McKinley, riding circuit, presided over these hearings, and by now the issue of the *Morse* myth was beginning to appear more explicitly in courtroom legal arguments, requiring its explicit refutation by both Morse and judges. Thus, in affirming the validity of Morse's patents (again) and in issuing an injunction against O'Reilly (again), Circuit Justice McKinley explained that Morse's "patent is not for a principle. It is not for electricity or electro-magnetism, or their use for *all* purposes, or even *all telegraphic purposes*; but it is for the application of this power to a specific purpose."²⁵⁹

Around the time of the *Bain* case and the ongoing litigation against O'Reilly in Kentucky and elsewhere, Morse and his business associates were experiencing increasing difficulties with Smith, who was renowned for being extremely volatile and obstreperous in his professional dealings. It was in fact Smith who precipitated the first lawsuit with O'Reilly in 1845. As a "tenant in common" in Morse's patent who did not join the agency agreement with Kendall,²⁶⁰

²⁵⁷ *Bain*, 2 F. Cas. at 407.

²⁵⁸ See STEVEN P. BROWN, JOHN MCKINLEY AND THE ANTEBELLUM SUPREME COURT: CIRCUIT RIDING IN THE OLD SOUTHWEST 215 (2012).

²⁵⁹ *Id.* at 217. Circuit Justice McKinley issued the injunction only for the jurisdiction in which he rode circuit, the Eighth Circuit. Thus, O'Reilly was enjoined only in Tennessee, and not in Alabama or Louisiana. *Id.*

²⁶⁰ *Clum v. Brewer*, 5 F. Cas. 1097, 1102-03 (C.C.D. Mass. 1855) (No. 2,909) (Curtis, Circuit Justice) (referring to Smith as a "tenant in common" given his "undivided fourth part" in the "title" to Morse's patent).

Smith was free to litigate on behalf of his own interests in the patent. True to form, litigate he did, filing at least four patent infringement lawsuits in multiple states between 1848 and 1850.²⁶¹

In these many new patent infringement cases, the defendants asserted their right as did O'Reilly before them to challenge the validity of Morse's patents. In addition to retreading arguments already raised by O'Reilly in Kentucky,²⁶² the argument that Morse over-claimed in his patents began to take shape as a legal argument asserted in the courtroom, as opposed to merely serving the broader "monopoly" charge against Morse in the public policy debates. In *Smith v. Ely*, for instance, defendants' *eighteenth counter-argument* asserted that Morse's patent was for something other than a technological innovation that could be secured under federal law.²⁶³ The court was unable to assess this contention because defendants failed to submit Morse's patent into evidence,²⁶⁴ but it felt it important to avoid any implied suggestion that this legal argument was improper as such:

It may not, however, be improper to remark, that a [scientific] principle is not patentable. And 'the motive power of the galvanic current, however developed to produce a given result,' can no more be patented than the motive power of steam to propel boats, however applied. The discovery or application of a power in physics can give no monopoly of that power. Electricity and steam were long known as powerful agents in nature, before the application of either as a motive power. And neither can be exclusively appropriated, except through the instrumentality of mechanical inventions or combinations which produce a certain effect.

If the *Smith* court had been able to see Morse's patent, it would likely have easily understood that Morse was *not* claiming all telecommunications powered by electricity, as did Circuit Justice

²⁶¹ See *Smith v. Downing*, 22 F. Cas. 511 (C.C.D. Mass. 1850) (No. 13,036); *Smith v. Ely*, 22 F. Cas. 533 (C.C.D. Ohio 1849) (No. 13,043); *Smith v. Clark*, 22 F. Cas. 487 (C.C.D. Mass. 1850) (No. 13,027); *Smith v. Seldon*, 22 F. Cas. 652 (C.C.N.D. N.Y. 1849) (No. 13,104).

²⁶² See, e.g., *Clark*, 22 F. Cas. at 487 (repeating arguments and evidence from Dr. Jackson, Henry and others and stating that he must then construe Morse's patent in a limited fashion for otherwise he would have to "void the patent"); SILVERMAN, *supra* note 3, at 315 (reporting that in *Smith v. Downing*, "Downing meant to fight back by contesting the validity of the patent, using the well-worn testimony of Dr. Charles T. Jackson").

²⁶³ See *Ely*, 22 F. Cas at 538 ("And in the eighteenth plea after stating the above, the defendants aver that the thing so 'patented and claimed, is not any art, machine, manufacture or composition of matter, or any improvement on any art, machine, manufacture or composition of matter,' &c.").

²⁶⁴ *Id.* ("The patent not being before us, as it would be, if offered in evidence, or copied into the declaration or plea, we cannot decide this question.").

McKinley in Tennessee²⁶⁵ and Judge Kane in Philadelphia²⁶⁶ in the litigation occurring elsewhere in the country. In brief, the *Smith* court would have understood the nature of the appropriate “principle” secured in Morse’s patent and, if unburdened by other personal policy biases, would have rejected the *Morse* myth later created by Chief Justice Taney.

All of this additional litigation brought by Smith forced Morse to increasingly spend his time and energy in collecting letters, documents and other evidence in defending his rights to his patented innovation. It was reported that the written testimony in just one of Smith’s many lawsuits was between 400-500 pages in length.²⁶⁷ Similarly, another lawsuit brought by another of Morse’s assignees created a case record of over 1000 pages.²⁶⁸ As Morse complained in a letter to his brother, “the movements of the most unprincipled set of pirates” has meant that “all my time has been occupied in defense, in putting evidence into something like legal shape that I am the inventor of the Electro-Magnetic Telegraph!!”²⁶⁹

As the public and legal battles waged on, Morse and his business associates began to circle the wagons in an ever tightening band. Morse, under pressure to continually defend his patented innovation from either the attacks of Dr. Jackson or the charge that a mere artist did not invent anything new, began to overreact and sometimes spoke more broadly about his contribution to electro-magnetic telegraphy. Thus, for example, he wrote in a letter in 1851: “*Telegraphic Speech by Electricity, as the principle of my whole invention.*”²⁷⁰ Although statements like this contradict his express disclaimers and positively stated terms in his patents,

²⁶⁵ See *supra* note 259 and accompanying text.

²⁶⁶ *French v. Rogers*, 9 F. Cas. 790, 793-94 (C.C.E.D. Pa. 1851) (No. 5,103) (distinguishing the prohibitive or restrictive approach in England from the more liberal approach in the U.S. in securing a new “art” to an inventor under the patent laws).

²⁶⁷ See JONES, *supra* note 241, at 30 (reporting that for *Smith v. Downing* the “printed testimony taken in the case amounted to between 400 and 500 pages”).

²⁶⁸ *Id.* at 41 (stating that in *French v. Rogers* “the evidence on both sides made about 1000 printed pages”).

²⁶⁹ Letter from Samuel F.B. Morse to Sidney Morse, Apr. 19, 1848, in 2 Samuel F.B. Morse, *supra* note 68, at 283.

²⁷⁰ Letter from Samuel F.B. Morse to George Gifford, Jan. 1, 1851, *quoted in* SILVERMAN, *supra* note 3, at 312.

in depositions and elsewhere, these sentiments would ultimately prove grist for the mill leading up to Chief Justice Taney’s decision.

Eventually, Smith’s obstreperous nature proved so difficult even for Morse and Vail that they ended up in litigation against Smith himself.²⁷¹ True to his rancorous nature, Smith retaliated mightily against Morse by lending support to Dr. Jackson in his charges that Morse stole the idea of the electro-magnetic telegraph from him.²⁷² Smith even went so far as to join forces with O’Reilly during nadir in his relationship with Morse.²⁷³ This proves that Smith’s reputation for being rash and ill-tempered was well deserved, because supporting Dr. Jackson was entirely self-defeating for him. If what Dr. Jackson said was true, it would have invalidated Smith’s property interests in the patent along with Morse’s interests as well.

Throughout this multi-year, multi-jurisdiction, multi-party patent war—the legal fight with O’Reilly was sometimes called the “Telegraphic War in the West”²⁷⁴—Morse was at times upset about this situation and at times he was sanguine about it.²⁷⁵ In a lengthy quote in an 1851 article in the *New York Daily Tribune*, Morse talked about how he convinced the inventor of an improved method for producing a daguerreotype not to apply for a patent: “He shall not be plagued with lawsuits, have his life shortened and miserable, and his just right to his property of his discovery snatched from him, if I can prevent it.”²⁷⁶ In a moment of calmer reflection several years later, Morse observed that “[l]aw is expensive” and “though it may be an evil to find ourselves bled so freely by lawyers, it is, perhaps, the least of evils to submit to it as gracefully as

²⁷¹ *Morse & Vail v. Smith* (NY Sup. Ct. 1852) [get proper case cite].

²⁷² See SILVERMAN, *supra* note 3, at 316-17.

²⁷³ *Id.* at 317.

²⁷⁴ BROWN, *supra* note 258, at 215.

²⁷⁵ Morse was prone to periodic fits of depression and severe mood swings. For instance, during the period in 1843 to 1844 when Morse’s telegraph was first being installed between Baltimore and D.C., Morse’s mood swings lead Alfred Vail to write to his wife, Jane Vail, that “He changes oftener than the wind. Now he is elated up to the skies, then he is down in the mud.” KENNETH SILVERMAN, *LIGHTNING MAN: THE ACCURSED LIFE OF SAMUEL F.B. MORSE* 234 (2004).

²⁷⁶ *The Hillotype*, NEW YORK DAILY TRIBUNE, June 17, 1851 (quoting letter from Professor Morse).

we can.”²⁷⁷ Kendall, attempting to gloss over his earlier promise that Morse would lead a happy life after their 1845 agreement,²⁷⁸ expressed in a letter that Morse’s fate was inescapable: “The troubles you encounter are but the tax a man has to pay for wealth and fame.”²⁷⁹

This extended discussion of the commercialization and extensive litigation over Morse’s patented electro-magnetic telegraph is important for understanding the *Morse* myth perpetrated by Chief Justice Taney in his 1853 opinion. As clear from the very text of Morse’s claims in Reissue Patent No. 117, including recognizing the unique structure of claiming the “principle” of his invention in Claims 1 and 8, which bookended his more specific claims to the specific technical elements of his electro-magnetic telegraph in Claims 2-7, it is clear that Morse did not intend for Claim 8 to be applied in isolation from the other claims or the specification. In fact, in these other claims and in related patents and other legal documents, Morse expressly disclaims what is foisted upon him by Chief Justice Taney in creating the *Morse* myth—that he was claiming to control that which he did not invent either before or after him.

This historical survey is even more important, because it makes clear why Morse transferred the language in his specification in his first reissue patent into Claim 8 in his second reissue patent: he was responding to the unceasing commercial and legal war being waged against him by O’Reilly and his supporters, who were deploying the Columbian Telegraph or other telegraphs that had some technical variations from Morse’s invention. Nonetheless, these electro-magnetic telegraphs still used the core “principle” of Morse’s patented electro-magnetic telegraph: they used a battery to produce electricity that then created a magnetic force that moved a mechanical armature to make permanent marks.

²⁷⁷ Letter from Samuel F.B. Morse to Judge E. Fitch Smith, Feb. 4, 1853, *in* 2 Samuel F.B. Morse, *supra* note 68, at 320.

²⁷⁸ See *supra* note 149 and accompanying text.

²⁷⁹ Letter from Amos Kendal to Samuel F.B. Morse, Dec. 8, 1848, *quoted in* SILVERMAN, *supra* note 3, at 293.

In fact, when O'Reilly embraced an entirely new electrical telegraph—the Bain telegraph—that did not reflect this core principle of Morse's patent(s) on the electro-magnetic telegraph, Morse applied for an entirely new patent. Bain's telegraph even made permanent marks as a result of the use of electricity. Yet, Morse knew that Bain's telegraph was not covered by his original patent on the electro-magnetic telegraph, and that if he was going to claim property rights in this form of telegraphic communication, he would need a whole new patent. Even more revealing is that Morse never sued Bain for patent infringement, even after the resolution of *Bain v. Morse*. When a telegraph company other than O'Reilly's People's Line was sued by one of Morse's assignees in Pennsylvania, it was properly captioned as *French v. Rogers*.²⁸⁰ In fact, Morse never sued a telegraph operator using House's patented telegraph either; rather, it was Smith who did this.²⁸¹ But for Smith's and other assignees' ongoing antagonism of competitors in the courts, and even Smith's vitriolic treatment of Morse himself, Morse's litigation experiences would have been limited only to the public, commercial and legal torments delivered upon him by O'Reilly—although this was more than sufficient by itself to have kept Morse very busy for many years!

The complete historical context of Morse's patents, his commercialization efforts, and the travails of his litigation with O'Reilly confirms that Chief Justice Taney's out-of-context characterization of Claim 8 in his *Morse* opinion—that it covers all electrical telecommunications or at least all electrical telecommunications that produce written marks—

²⁸⁰ 9 F. Cas. 790 (C.C.E.D. Pa. 1851) (No. 5,103). See *The Great Telegraph Case*, THE NEW YORK TIMES, Nov. 5, 1851, at 3 (reporting on the victory for the assignee of Morse's two primary patents in *French v. Rogers*). This case was clearly not brought by Morse, but it's often associated with Morse given that it involved his patents, and Morse was attacked in the public debates at the time as the alleged plaintiff in this case. See JONES, *supra* note 241, at 41 (attacking Morse's patents in describing “the trial between *French v. Rogers*, or *Morse v. Bain* in Philadelphia, in 1851”); *Telegraph Decisions*, THE NEW YORK TIMES, Nov. 8, 1851, at 2 (decrying the decision in *French* as “an end to all progress in the arts” because follow-on inventors like House and Bain would be “stopped off by the first crude and really impracticable propositions and attempts of Mr. Morse”). As a result, the *French v. Rogers* case report is published twice in *Federal Cases*. This second is *Morse & Bain Tel. Case*, 17 F. Cas. 873 (C.C.E.D. Pa. 1851) (No. 9,861), but it is significant that this second report is not captioned with Morse as a plaintiff.

²⁸¹ See *Downing*, 22 F. Cas. at 512 (“The prayer of the bill, by Smith, the assignee of Morse, is for a permanent and final injunction in equity against those who are operating under House.”).

twisted Morse’s patent into something that it was not. To be clear, modern-day scholars and judges are not to blame for the *Morse* myth, because this is exactly what Chief Justice Taney created in his *Morse* opinion. It is not a modern creation; it is an escapable byproduct of the opinion written by Chief Justice Taney that focuses solely on Claim 8, and thus ignores the other claims and specifications in Reissue Patent No. 117, as well as ignores all the other patents and other legal documents in the case record.

V. THE MAKING OF THE *MORSE* MYTH

The concern about the scope of Morse’s patent expressed by Chief Justice Taney in his *Morse* opinion was not entirely out of left field given all of the satellite litigation between 1848 and 1852. By the time of the oral argument before the Supreme Court in December 1853, the argument that Morse was over-claiming in his patent was now included among all the other legal arguments presented to the Court,²⁸² despite O’Reilly never having raised this affirmative defense before Judge Monroe in the District Court in Kentucky.²⁸³ The numerous “monopoly” charges and the (incorrect) attacks on Morse’s innovative technology as retarding progress in the telegraphic communication²⁸⁴ would find a willing ear in a committed Jacksonian Democrat. Although there appears to be no smoking gun that directly indicts Chief Justice Taney,²⁸⁵ the circumstantial evidence presents a compelling case that the *Morse* opinion was indeed shaped more by Chief Justice Taney’s policy biases than by law. This is the case for two reasons, one

²⁸² See THE ELECTRIC TELEGRAPH: SUBSTANCE OF THE ARGUMENT OF S.P. CHASE BEFORE THE SUPREME COURT OF THE UNITED STATES FOR THE APPELLANTS IN THE CASE OF H. O’REILLY, AND OTHERS, VS. S.F.B. MORSE, AND OTHERS, ON APPEAL FROM THE CIRCUIT COURT FOR THE DISTRICT OF KENTUCKY 17-26 (1853); see also *Invention of the Electric Telegraph—The Great Telegraph Case in the Supreme Court of the United States*, THE NEW YORK TIMES, Feb. 2, 1853, at 6 (summarizing Salmon P. Chase’s lengthy oral argument on behalf of O’Reilly in which he attacks the “eighth claim” on the grounds that “*Morse invented no new art, discovered no new principle, and the body of the patent is expressly confined to an ‘improvement’ on previously invented electric telegraphs*”).

²⁸³ See *supra* notes 207-211 and accompanying text.

²⁸⁴ See, e.g., *Telegraph Decisions*, *supra* note 280 (decrying the 1851 decision in *French* as “an end to all progress in the arts” because follow-on inventors like House and Bain would be “stopped off by the first crude and really impracticable propositions and attempts of Mr. Morse”). The fact is that House’s and Bain’s telegraphs were not better than Morse’s.

²⁸⁵ Extensive research efforts in a variety of archives have not produced a statement by Chief Justice Taney declaring his animus against patents generally or Morse specifically.

that deals with the general views of Jacksonian Democrats about monopoly franchise grants and the other about Chief Justice Taney’s approach in patent cases evidencing these views.

First, it is no secret that a central political principle of Jacksonian Democracy is a deep-seated antipathy toward state-granted franchises or monopolies. The oft-cited exemplar of this political principle is Chief Justice Taney’s famous decision in *Charles River Bridge v. Warren Bridge*,²⁸⁶ in which the Court strictly limited the legal and constitutional protections afforded to a monopoly franchise granted by Massachusetts.²⁸⁷ Chief Justice Taney’s decision in *Charles River Bridge*, delivered just one year after his appointment to the Court by Jackson, is widely regarded as “reflect[ing] the prevailing anti-monopoly sentiment that was one of the hallmarks of the Jacksonian period.”²⁸⁸ This was an instance in which Jacksonian Democratic political ideology matched the law, as the narrow construction of the franchise grant and the resulting limited protections afforded to its owner was consistent with well-established common law rules governing legal franchise grants in derogation of common law rights.²⁸⁹

Even before his appointment to the Supreme Court, Chief Justice Taney evidenced his strident commitment to the Jacksonian distrust of state-granted franchises. During Jackson’s war against the United States Bank, it was both Taney and Kendall who broke ranks with all of the other members of Jackson’s cabinet and enthusiastically supported Jackson’s political campaign

²⁸⁶ 36 U.S. (11 Pet.) 420 (1837).

²⁸⁷ The *Charles River Bridge* Court affirmed a Massachusetts Supreme Judicial Court decision, which expressly rejected the franchise owner’s claim that he should be given a “liberal and extended construction of the charters” because this was “inconsistent with the improvement and prosperity of the state.” *Charles River Bridge v. Warren Bridge*, 24 Mass. (7 Pick.) 344, 467 (1829), *aff’d*, 36 U.S. (11 Pet.) 420 (1837). The Massachusetts Supreme Judicial Court concluded that it “ought . . . to adopt a more limited and restricted” construction of the franchise. *Id.* at 467–68. The U.S. Supreme Court agreed, and continued thereafter to rely on *Charles River Bridge* to construe narrowly any “grant of certain privileges by the public, to a private corporation.” *Richmond, Fredericksburg, & Potomac R.R. Co. v. Louisa R.R. Co.*, 54 U.S. (13 How.) 71, 81 (1851). The established “rule of construction” for such franchises was that “any ambiguity in the terms of the contract must operate against the corporation, and in favor of the public.” *Id.* (quoting *Charles River Bridge*, 36 U.S. (11 Pet.) at 544).

²⁸⁸ Deborah A. Ballam, *The Evolution of the Government-Business Relationship in the United States: Colonial Times to Present*, 31 AM. BUS. L.J. 553, 592 (1994).

²⁸⁹ See, e.g., *Brown v. Barry*, 3 U.S. (3 Dall.) 365, 367 (1797) (stating that a legislative “act . . . being in derogation of the common law, is to be taken strictly”).

to terminate the bank.²⁹⁰ Taney was Attorney General, and he showed unflinching support for Jackson’s decision to illegally divest funds from the U.S. Bank and to deposit them in his state “pet banks.”²⁹¹ In fact, Jackson summarily fired his Treasury Secretary who refused to knowingly violate the law and face impeachment.²⁹² Jackson then appointed Taney as interim Treasury Secretary, but only because Taney was one of the only officials in Jackson’s cabinet willing to do without question what Jackson illegally ordered to done—to “kill” the bank.²⁹³

For purposes of understanding the *Morse* myth, Jackson’s illegal war on the bank in the 1830s—it resulted in an official censure by the Senate for Jackson having “assumed upon himself authority and power not conferred by the Constitution and the laws”²⁹⁴—is important because it was fully supported and even implemented by Jackson’s Attorney General and interim Treasury Secretary, Roger Taney. This reveals a deep commitment to personal political preferences (and even to cronyism) over the rule of law.²⁹⁵ Later in *Dred Scott*, when Chief Justice Taney once again placed first in his mind and action his political preferences—this time it was the equally strong commitment of Jacksonian Democrats to racism and slavery—this was not an anomaly.²⁹⁶ It reflected a commitment to rationalizing a disregard for the law in pursuit of a Jacksonian political vision of “popular sovereignty.”²⁹⁷

Chief Justice Taney’s behavior in patent cases was no different, as he ignored express statutes and sought to limit patents in favor of a Jacksonian vision of what patents represented. This is not a surprise, because the fundamental antipathy among Jacksonian Democrats to state-granted franchises extended to intellectual property rights as well. For instance, the famous

²⁹⁰ See HOWE, *supra* note 4, at 379.

²⁹¹ See *id.* at 386-90.

²⁹² See *id.* at 387-88.

²⁹³ *Id.* at 379 (quoting Jackson’s announcement about the bank, “I will kill it!”).

²⁹⁴ See *id.* at 389 (quoting the censure). This is the only time a U.S. President has been officially censured by the Senate. *Id.*

²⁹⁵ The historian, Daniel Howe, reports that one of the most irresponsibly behaving “pet banks” was one in which Taney was both legal counsel and a stockholder. See *id.* at 393.

²⁹⁶ See *id.* at 441-42.

²⁹⁷ See *id.* at 441.

Jacksonian Democrat and newspaper editor, William Leggett, “assail[ed] the position of the natural right of property in ideas.”²⁹⁸ He repeatedly and strenuously “den[ied] the author and inventor have any property in the fruits of their intellectual labor.”²⁹⁹ As he concluded in another of his newspaper essays: “we think we should have no great difficulty in showing that the general welfare would be advanced by abolishing the principle of exclusive property in written compositions.”³⁰⁰ Leggett believed the same point applied with equal force to patents.³⁰¹

To be fair, Leggett represented merely one strand of Jacksonian political ideology, and Chief Justice Taney certainly was not an intellectual property abolitionist. In fact, in some earlier cases, Chief Justice Taney appeared to be more solicitous of patent rights, at least before *The Great Telegraph Case* came to the Court in 1852 by a petition from the infringing owner of *The People’s Line*. A few years earlier, for instance, Chief Justice rightly applied both the patent statutes and established case law in reaffirming that “the discovery of a new and useful improvement is vested by law with an inchoate right to its exclusive use, which he may perfect and make absolute by proceeding in the manner which the law requires.”³⁰² As I have explained in prior scholarship, this statement by Chief Justice Taney comprises key concepts from common law property law—such as inchoate right, perfect and exclusive use—that were widely incorporated by courts into American patent jurisprudence in the Antebellum Era.³⁰³ Given the conceptual framing of patents as tantamount to common law property rights, patents were liberally construed and expansively protected by the courts as fundamental property rights,

²⁹⁸ William Leggett, *The Rights of Authors*, PLAINDEALER, Feb. 11, 1837, reprinted in DEMOCRATICK EDITORIALS: ESSAYS IN JACKSONIAN POLITICAL ECONOMY BY WILLIAM LEGGETT 396, 402 (Lawrence H. White ed., 1984).

²⁹⁹ *Id.* at 403.

³⁰⁰ William Leggett, *Rights of Property in the Fruits of Intellectual Labor*, PLAINDEALER, Feb. 25, 1837, *supra* note 298, at 405.

³⁰¹ See Leggett, *supra* note 298, at 401 (“The law of patents rests confessedly on the same principle as the law of copyright.”).

³⁰² *Gaylor v. Wilder*, 51 U.S. (10 How.) 477, 493 (1850).

³⁰³ See Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 16; Mossoff, *supra* note 14, at 347-60.

which provides a sharp contrast to the manner in which state-granted franchises or monopolies treated in such cases as *Charles River Bridge*.³⁰⁴

But Chief Justice Taney eventually fell back into his old habits from his days in Jackson’s cabinet, and soon political commitments soon trumped legal commitments for him in the patent cases coming before the Court. In 1852 decision in *Bloomer v. McQuewan*,³⁰⁵ for instance, Chief Justice Taney’s opinion judicially rewrote the patent statutes to reflect Chief Justice Taney’s personal policy view that patents were state-granted franchises, as opposed to property rights secured in doctrinally similar ways as other longstanding property rights at common law. At the time, patents were defined as fundamental property rights, securing the exclusive rights to acquire, use and dispose of technological innovation,³⁰⁶ but Chief Justice Taney asserts in *Bloomer* that patents are “franchises” and as such secure only “a right to exclude.”³⁰⁷ By construing patents as “franchises,” Chief Justice Taney attempted to reframe the doctrinal nature of patents and thus make them more susceptible to the strict legal limitations imposed on monopoly franchises, as opposed to the favorable treatment of patents as fundamental property rights.

Famed patent law historian, Edward Walterscheid, states that Chief Justice Taney’s *Bloomer* opinion represents an “extraordinary holding which appeared on its face so contradictory to the statutory language.”³⁰⁸ In fact, Chief Justice Taney’s *Bloomer* opinion has

³⁰⁴ See Mossoff, *Reevaluating the Patent “Privilege” in Historical Context*, *supra* note 16, at 999-1001 (contrasting *Charles River Bridge* with many cases and doctrines in which patents were liberally and broadly secured as civil rights in fundamental property rights).

³⁰⁵ 55 U.S. (14 How.) 539 (1852).

³⁰⁶ See Patent Act of 1836, ch. 357, § 11, 5 Stat. 117, 121 (repealed 1870) (providing that “every patent shall be assignable in law” and that this “conveyance of the exclusive right under any patent, to make and use, and to grant to others to make and use, the thing patented” must “be recorded in the Patent Office”); Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 321 (repealed 1836) (providing that a patent secures “the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery”); Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 110 (repealed 1793) (providing that a patent secures “the sole and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention or discovery”).

³⁰⁷ *Bloomer*, 55 U.S. at 549.

³⁰⁸ Edward C. Walterscheid, *Divergent Evolution of the Patent Power and the Copyright Power*, 9 MARQ. INTELL. PROP. L. REV. 307, 330 (2005).

been similarly misinterpreted by modern scholars and courts for the exact same reasons that have given rise to the *Morse* myth: patent law changed in the ensuing one hundred years,³⁰⁹ and these later legal developments now make it seem to lawyers and judges today that Chief Justice Taney’s judicial activism was legitimate in its time.³¹⁰ It was not.

The final key to understanding the politically motivated nature of Chief Justice Taney’s *Morse* opinion is the Supreme Court’s 1854 decision in *Winans v. Denmead*,³¹¹ which makes exactly clear both what Chief Justice Taney was doing in *Bloomer* and what his likely preferred result would have been in *Morse* (decided that same year). In *Winans*, the Court was faced directly with the question of whether a patentee could sue someone for infringement when the allegedly infringing device was not identical to what was claimed in the literal text in the patent.

In this case, the patentee claimed as “[t]he principle” of the invention a “conical” railway car for the “transportation of coal, and all other heavy articles in lumps.”³¹² The district court had ruled that the defendant was not liable for patent infringement, because the patentee’s “claim was limited to the particular [conical] geometrical form mentioned in the specification,” and thus this did not cover the defendant’s *octagonal-shaped* railway car.³¹³ In his opinion for a divided Supreme Court, Justice Benjamin Curtis overruled the district court, explaining:

Patentees sometimes add to their claims an express declaration, to the effect that the claim extends to the thing patented, however its form or proportions may be varied. But this is unnecessary. The law so interprets the claim without the addition of these words. The exclusive right to the thing patented is not secured, if the public are at liberty to make substantial copies of it, varying its form or proportions. And, therefore, the patentee, having described his invention, and shown its principles, and claimed it in that form which most perfectly embodies it, is, in contemplation of law, deemed to claim every form in which his invention

³⁰⁹ The 1952 Patent Act expressly defines patents as securing only the “right to exclude.” See 35 U.S.C. § 154.

³¹⁰ See Mossoff, *supra* note 14, at 341-42 (discussing common anachronisms by the Federal Circuit and prominent patent scholars, such as David Chisum, in reference to *Bloomer*).

³¹¹ 56 U.S. (15 How.) 330 (1854).

³¹² *Winans*, 56 U.S. at 330-31 (quoting from the patent, which issued in 1847).

³¹³ *Id.* at 340.

may be copied, unless he manifests an intention to disclaim some of those forms.³¹⁴

The *Winans* decision is relevant for understanding the *Morse* myth for two reasons. First, the patent infringement complaint in *Winans* was directly analogous to Morse’s patent infringement complaint against O’Reilly. In both cases, the defendant’s device was different from that of the patent claim in “form or properties.”³¹⁵ As explained in Part Four, O’Reilly’s Columbian Telegraph did not use an electro-magnet activated by an alternating electrical current, but instead used two batteries to create a magnetic force in the armature, which was then attracted or repelled to two permanent magnets.³¹⁶ This is why O’Reilly and his witnesses kept arguing that the Columbian Telegraph was ‘essentially different’ from the electro-magnetic telegraph claimed in Morse’s Reissue Patent No. 117.³¹⁷ This is also why Morse and his witnesses had to keep explaining that the Columbian Telegraph still constituted “the principle” secured by the patent,³¹⁸ and in fact that it merely “substitutes complication for discovery, and cumbrous and inconvenient motion for improvement.”³¹⁹ In brief, Morse’s case against O’Reilly was a case of what patent lawyers today would call “equivalents” infringement (and in fact *Winans* is oft-cited as an equivalents case³²⁰), and *Winans* confirms that the non-literal violation of a patent’s “principles” is a valid basis for finding a defendant liable for patent infringement.³²¹

³¹⁴ *Id.* at 343.

³¹⁵ *Id.*

³¹⁶ See *supra* notes 212-216 and accompanying text.

³¹⁷ See *supra* note 212 and accompanying text.

³¹⁸ See *supra* notes 217-222 and accompanying text.

³¹⁹ See *supra* note 222 and accompanying text.

³²⁰ See, e.g., *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 732 (2002) (“The scope of a patent is not limited to its literal terms but instead embraces all equivalents to the claims described. See *Winans v. Denmead*, 56 U.S. (15 How.) 330, 347 (1854).”).

³²¹ Justice Curtis’s *Winans* opinion expresses the exact same policy concern about devaluing “the property of inventors” that was voiced by Morse and other judges and Justices about the necessity for finding O’Reilly liable for infringement with his Columbian Telegraph:

It is only ingenious diversities of form and proportion, presenting the appearance of something unlike the thing patented, which give rise to questions; and the property of inventors would be valueless, if it were enough for the defendant to say, your improvement consisted in a change of form; you describe and claim but one form; I have not taken that, and so have not infringed.

Winans, 56 U.S. at 342-43.

The second reason *Winans* is a necessary piece of circumstantial evidence in establishing the *Morse* myth is that Chief Justice Taney joined Justice John Campbell’s dissent in *Winans*, which argued that there cannot be infringement by merely equivalent-type devices. In his dissent, Justice Campbell expressed the exact same policy concern about the allegedly unbounded nature of the patent claim in *Winans* that Chief Justice Taney expressed about the allegedly unbounded nature of Morse’s Claim 8:

The claim of to-day is, that an octagonal car is an infringement of this patent [on a conical car]. Will this be the limit to that claim? Who can tell the bounds within which the mechanical industry of the country may freely exert itself? *What restraints does this patent impose in this branch of mechanic art?*³²²

Moreover, echoing the legal principles employed by Chief Justice Taney in limiting the legal protection afforded to the franchise grant in *Charles River Bridge*, Justice Campbell declared that the “public interest” required that each patent be limited to its “particular and specific” terms.³²³

Chief Justice Taney joined Justice Campbell’s dissent in *Winans*, which meant that he also did not think that Morse should have been able to accuse O’Reilly of the exact same equivalents (“principle”) infringement of Reissue Patent No. 117. Moreover, Justice Campbell justified his *Winans* dissent by invoking the same common-law principles that directed courts to narrowly construe and limit monopoly franchise grants. As established in *Charles River Bridge*, these were political and legal principles to which Chief Justice Taney was firmly committed, and which he had already begun to apply to patents in his framing of these legal entitlements as “franchises” in such decisions as *Bloomer*.³²⁴ This is the full context for Chief Justice Taney’s accusation in *Morse* that Morse was claiming a “monopoly” in Claim 8.³²⁵

³²² *Winans*, 56 U.S. at 347 (Campbell, J., dissenting) (emphasis added). See *supra* note 30-31 and accompanying text (quoting from Taney’s *Morse* decision that “the extent this claim” means that Morse “shuts the door against inventions of other persons”).

³²³ *Id.*

³²⁴ *Bloomer*, 55 U.S. at 549.

³²⁵ *Morse*, 56 U.S. at 113. See also *supra* note 31 and accompanying text.

The full context of Chief Justice Taney’s official actions, both in the Jackson Administration and on the Court, establish that his *Morse* opinion was driven more by his Jacksonian policy bias against state-granted monopoly franchises than by established patent law or policy in the Antebellum Era. This is further supported by the full context of all of Morse’s patents, his commercialization efforts, and the extensive litigation over the electro-magnetic telegraph.³²⁶ Taken together, the historical evidence establishes that Claim 8 did not mean what Chief Justice Taney asserted it meant in his *Morse* opinion. Although Kendall was able to set aside his Jacksonian political principles in service to his own substantial financial interests in Morse’s patented innovation,³²⁷ Chief Justice Taney proved in *Morse*, *Bloomer*, and *Winans* that he could not so easily abandon the political ideology that earned him his position on the Court. If anything, this is further confirmed in Chief Justice Taney’s even more infamous decision in *Dred Scott* four years after the conclusion of The Great Telegraph Case.³²⁸

VI. CONCLUSION

Chief Justice Taney’s view of patents as monopoly franchise grants that should be strictly limited in their legal protection was certainly part of the policy debates in his day, as they are today as well. But this does not justify the scholarly and judicial reliance today on *Morse* as a fundamentally correct statement of American patent jurisprudence. It was instead a decision corrupted by policy biases and untrue factual assumptions about the nature of Morse’s patents securing his invention of the electro-magnetic telegraph. In fact, the difficulties courts and scholars have had in converting *Morse* into a definitive legal rule, especially in the patentable

³²⁶ See *supra* Part IV.

³²⁷ See WOLFF, *supra* note 2, at 20 (“After a political career as a Jacksonian opponent of state-sponsored monopoly—particularly the monstrous state-granted monopoly of the Bank of the United States—Kendall now became an ardent defender of the patent monopoly the state had granted to Morse and his associates.”).

³²⁸ See *Dred Scott v. Sandford*, 60 U.S. 393 (1857).

subject matter area, may simply be a byproduct of a fundamentally corrupted decision now deemed to be foundational statement for the rule that one cannot patent an “abstract idea.”³²⁹

Regardless of these ongoing legal and policy debates, the *Morse* myth—that Chief Justice Taney correctly reined in an aggrandizing patentee who was attempting to control electrical telecommunications that went far beyond what he invented—should be officially laid to rest. It is a legally incorrect statement that fails to recognize fundamental differences in patent law doctrine in the Antebellum Era. Even worse, it ultimately conceals a politically motivated decision by a Supreme Court Justice who is widely recognized outside of the limited domain of patent law for this similarly inappropriate judicial comportment. It is time to set the historical record straight and thus to set aside the *Morse* myth in American patent jurisprudence for the same legitimate reasons that constitutional scholars and Justices have set aside *Dred Scott*.

³²⁹ Cf. Kristen Osenga, *Debugging Software’s Schemas*, GEO. WASH. L. REV. (forthcoming 2014) (“The fact that ‘no one understands what makes an idea “abstract”’ could be related to the historical path patent eligibility jurisprudence has taken.”). See also Mark A. Lemley et al., *Life After Bilski*, 63 STANFORD L. REV. 1315, 1346 (“The abstract ideas limitation on patentable subject matter has long been a puzzle, one *Bilski* did little to resolve.”); Collins, *supra* note 32, at 39 (stating that the “abstract idea” doctrine today represents “an ‘I know it when I see it’ jurisprudence at the Supreme Court and it offers no prospective guidance for the patent community”).