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## "I Think of the Future": The Long 1850s and the Origins of the Americanization of the World

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“I Think of the Future”: The Long 1850s and the Origins of the Americanization of the World

by

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A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
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## Dedication

To my parents, Christine Elaine and Benson Thomas Taylor

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This project would not have been possible without the resolute support of my academic advisors Dr. Irwin, Dr. Prince, Dr. Johnson, and Dr. Funke. They all patiently listened to ideas and offered priceless guidance in my academic career generally and this dissertation in particular. The administrative staff at the history department of USF were invaluable through this process, as were the archivists at the Connecticut State Library and the Connecticut Historical Society. My three daughters Lexi, Zoe, and Lilli were always supportive, even as I snuck a few pages of historiography at school plays and music recitals. I owe a special thanks to my wife, Janelle, for her unwavering support and empathy over the last five years. During that period, she listened to countless hours of rambling about Samuel Colt or transatlantic European travelers. I don't know what I'll ramble about for the next five years, but I promise it won't be set in the 1850s!

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## Abstract

While historians often point to the rise of the United States as a major global player and technological leader on the world stage in the 1890s and early 1900s, this study argues it was the 1850s, not the 1890s, that this transition occurred. It utilizes transnational methodologies to analyze European perceptions of the United States, American international businessmen, and new ways Americans thought and talked about their place in the world. During the 1850s, European travelers to the United States began to recognize the young nation was taking the lead in technological innovation, while American businessmen like Samuel Colt began to take mass-produced goods to Europe and the world. American politicians, infrastructure boosters, and the commercial press worked to reimagine the place of the United States in the world, not as peripheral to Europe but rather at the center of a global commercial system. These trends would only be amplified as the nineteenth century wore on, until Europeans like the British journalist William Stead announced the “Americanization of the world” in the early 1900s. This study analyzes the origins of this process in the United States of the 1850s.

## Introduction: The United States and the World in the Long 1850s

On a bitter winter morning in February 1857, Samuel Colt, the flamboyant inventor of the revolving firearm, moved into his eclectic mansion in Hartford, Connecticut. With over twenty rooms, it was one of the largest private residences in the Northeast. Ostentatious Italian architecture and the numerous Russian minarets that peppered the roof gave the residence a decidedly international flare, reflecting an aesthetic sensibility that Colt had acquired while travelling the world to sell his famed six-shooter revolving pistol.<sup>1</sup> The property overlooked Colt's state-of-the-art production site, a three-story factory on the banks of the Connecticut River that housed the most advanced gun-making machinery of the day. After the factory opened in 1855, hundreds of machines meticulously manufactured each of the nearly two-dozen pieces of Colt's revolver. The mass-produced weapons that poured forth by the hundreds of thousands not only accompanied American settlers into the newly acquired western United States; they were also employed by British troops in India, Russian Cossacks in Crimea, and intrepid explorers in the Amazon. The international reach of his revolvers was embodied in Colt's "Cabinet of Memorials," a display case housed in one of the sitting rooms on the second floor of his residence. In it, Japanese samurai swords lay beside Siamese dinnerware and Russian snuffboxes, all gifts Colt received through the extensive business transactions he directed as head of a sprawling global gun empire. By the end of the 1850s, Colt's was one of the richest men in

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<sup>1</sup> The property is described in great detail in Henry Barnard, *Armsmear: The Home, the Arm, and the Armory of Samuel Colt*, (New York: Alvord Printer, 1866), accessed February 10, 2018, <https://babel.hathitrust.org/cgi/pt?id=uc1.31822011848074;view=1up;seq=16>. Property also visited by the author, May 2015.

the United States, thanks to the weapons he had sold from Bangkok and Brazil to California and Cape Town.<sup>2</sup>

But if Samuel Colt's career was remarkable, it was not unique. Indeed, Colt was part of a growing surge of American businessmen who pushed out into the world in the 1850s. Cyrus McCormick, for instance, found such a demand for his reapers in Europe that he signed a licensing agreement with a Scottish firm and directly exported thousands of machines to the continent.<sup>3</sup> Alfred Hobbes, the famed lock maker who wowed the British public at the London Crystal Palace Exhibition in 1851 after breaking the previously uncrackable Bramah Lock, found such a market for his wares he brought his lock-making machinery across the Atlantic and set up shop in the heart of London.<sup>4</sup> Together, these men and dozens of others like them represented a new type of American businessman. Not trading simple raw materials like cotton or wheat, these Americans took cutting edge inventions, machinery, and engineering abilities out into the world.

As these Americans and their businesses moved out into the world, Europeans took notice. Colt was the first foreigner to receive the prestigious Telford Medal by the British Society of Civil Engineers in 1853, and his Hartford factory was toured by British engineers and laymen alike. European travelers consistently remarked on the widespread use of machinery they found in the United States, a fact that pushed them to ponder the larger implications of the United States' growing size and power. After touring North America in the mid-1850s, the Russian bureaucrat and academic Aleksandre Lakier published a travel narrative of his journey in 1859. In the conclusion, Lakier posed a fateful question to his fellow Europeans. "But must Americans

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<sup>2</sup> These claims will be discussed in more detail in Chapters 2 and 3.

<sup>3</sup> Mira Wilkins, *The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914* (Cambridge, Mass, Harvard University Press, 1970).

<sup>4</sup> "Hobbs' Lock Manufactory," *The Engineer* (March 18, 1859), accessed November 15, 2017, <http://www.gracesguide.co.uk/images/5/51/Er18590318a.pdf>, 188-191. McCormick and Hobbs will be discussed in further detail in Chapter 2.



be confined to America,” he asked, “or are they fated to return to Europe?” After considering the phenomenal growth and technological innovations he witnessed in the States, Lakier answered his own question with a bold prediction. “They will have an influence on Europe,” Lakier asserted, “but they will use neither arms nor sword or fire, nor death and destruction. They will spread their influence,” he continued, “by the strength of their inventions, their trade, and their industry.”<sup>5</sup> Indeed, Lakier’s prophecy was already being fulfilled, for just a few months before his book was published Samuel Colt finalized a deal with Czar Alexander II to supply gun-making machinery for a new Russian armory in Tula.

Lakier’s striking prediction bears a remarkable similarity to later cries of Americanization that echoed across the European continent at the turn of the twentieth century, including most famously in the veteran British journalist William Stead’s far-reaching *The Americanization of the World*, first published in 1901.<sup>6</sup> Much like Stead, historians have traditionally depicted the United States as a technologically dependent and insular nation pursuing its own internal development during the antebellum years before exploding onto the world stage in the 1890s and early 1900s. Indeed, scholars often cite *The Americanization of the World* as a turning point when Europeans across the political spectrum began to appreciate and grapple with the shocking rise of the behemoth across the Atlantic.<sup>7</sup> This narrative was succinctly summarized by the historian Daniel Rodgers in his celebrated *Age of Social*

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<sup>5</sup> Aleksandre Lakier, Arnold Schrier, and Joyce Story, *A Russian looks at America: the journey of Aleksandr Borisovich Lakier in 1857; translated from the Russian and edited by Arnold Schrier, Joyce Story ; foreword by Henry Steele Commager ; introduction by Arnold Schrier*, (Chicago: University of Chicago Press, 1979), 262.

<sup>6</sup> Stead, William T. *The Americanization of the World; or, The Trend of the Twentieth Century* (New York: H. Marekley, 1901).

<sup>7</sup> See, for example, Kristin Hoganson, *Consumer’s Imperium: The Global Production of American Domesticity, 1865-1920*, (Chapel Hill: The University of North Carolina Press, 2007), Mary Nolan, *Visions of Modernity: American Business and the Modernization of Germany*, (New York: Oxford University Press, 1994), and Robert W. Rydell and Rob Kroes, *Buffalo Bill in Bologna: The Americanization of the World, 1869-1922*, (Chicago: University of Chicago Press, 2005).

*Politics*: “From a commercially peripheral, agriculturally based, capital- and good-importing nation, the United States vaulted almost overnight into the role of the world’s engine of capitalist social and economic production.”<sup>8</sup> Yet, as the international business career of Samuel Colt and the poignant question posed by Alexandre Lakier illustrates, the changing role of the United States in the world was accomplished less by a sudden vault and more by a steady growth that began a half century before.

This dissertation recovers and traces the roots of this transition. The 1850s, I contend, was a watershed period in which the United States began to assume many of the characteristics that would define its role in the world in the early twentieth century. In these years, American businessmen like Samuel Colt brought the technological superiority of American machinery and mass production to the world’s attention, and European observers from across the political spectrum began to realize and grapple with the rapidly growing power of their young neighbors across the Atlantic. And like Colt, Americans from a wide array of backgrounds found a new confidence, new assertiveness, and new global vision when talking about their nation’s place in the world. Just a few months after the close of the decade, the famed poet Walt Whitman celebrated this new confidence. “I chant the new empire, greater than any before,” Whitman rejoiced. “You shall sit in the middle thousands of years.”<sup>9</sup>

Examining several diverse but closely entwined subjects—the careers of international businessmen, foreign observations of the United States, and national discourses around the place of the United States in the world—I show that the 1850s marked a seminal turning point in the way the United States interacted with the wider world. The innovative business practices of

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<sup>8</sup> Daniel T. Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age*, (Cambridge: Harvard University Press, 1998), 253.

<sup>9</sup> Walt Whitman, “The Errand Bearers,” *The New York Times*, June 27, 1860, 2, accessed June 4, 2018, <https://whitmanarchive.org/published/periodical/poems/per.00154>.

entrepreneurs like Samuel Colt, such as including the slogan “sold all over the world” in advertisements or depicting manufactured products being used in exotic foreign settings, would be emulated and expanded upon by the major multinational corporations of the late nineteenth century, among them Kodak, Singer, and Spalding.<sup>10</sup> The foreign observations of Europeans like Alexandre Lakier, who carefully measured the growth of the United States and weighed its implications for both Europe and the world, would continue to animate conversations about Americanization in the early 1900s and indeed well into the twentieth century. And the buoyed confidence in which Americans talked about their place in the world presaged discussions that would serve as the foundation for American foreign policy in the decades to come. If the turn of the twentieth century marked a major change in the way the United States interacted with and was interpreted by the wider world, I argue that it was the 1850s—not the 1890s, as so many commonly assert—that marks the origins of those meteoric shifts.

In exploring the changing role of the United States in the world, I build on the work of transnational history that has reshaped the field since the 1990s. This burgeoning subfield is built upon the foundational understanding that a nation’s history cannot be understood simply by looking within the borders of that nation, but rather by recognizing that each region of the world is embedded in a complex series of interchanges, which integrally shaped both the development of a given region and the experience of the people on the ground. Transnational history seeks to examine processes and movements of people, goods, and ideas, that took place above, below, or through the nation-state.<sup>11</sup> Scholars of transnational history have greatly expanded the diversity

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<sup>10</sup> For Kodak and Singer see Mona Domash, *American Commodities in an Age of Empire*, (New York: Routledge, 2006), for Spalding see Thomas W. Zeiler, *Ambassadors in Pinstripes: The Spalding World Baseball Tour and the Birth of the American Empire*, (Lanham, MA: Rowman and Littlefield Publishers, Inc., 2006).

<sup>11</sup> For the theoretical and methodological origins of the field, see for example David Thelan, “The Nation and Beyond: Transnational Perspectives on United States History,” *Journal of American History* 86, no. 3 (December 1999): 965-975, Thomas Bender, ed., *Rethinking American History in a Global Age*, (Berkeley: University of California Press, 2002), Christopher Bayly et. al., “AHR Conversations: On Transnational History,” *American*

of historical actors that traditionally fall under the heading “foreign relations,” moving away from an older focus on diplomats and ambassadors and instead examining athletes, sailors, businesspeople, and tourists.<sup>12</sup> These transnational historical actors, as many historians have shown, played a decisive role in shaping and defining the nation and its relationship with the outside world.

Our understanding of the history of the United States has been fundamentally reshaped by the growing contributions of transnational history in the last twenty years. Studies on the intersection of public and private entities in American foreign policy have brought to the fore the critical role that non-state actors like the Red Cross, the Rotary Club, or Pan American Airways played in shaping and normalizing the United States’ expanding role in the world since the Civil War.<sup>13</sup> Studies of transnational race relations like Andrew Zimmerman’s *Alabama in Africa*, Julie Green’s *Canal Builders*, and Theresa Runstedtler’s *Jack Johnson, Rebel Sojourner* explore how American preconceptions of race were both reinforced and challenged in a variety of international settings.<sup>14</sup> And multiarchival studies like Don Doyle’s *The Cause of All Nations* or Brooke Blowers *Americans in Paris* illustrate that major events of United States history, like the

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*Historical Review* 111, no. 11 (December 2006): 1441-1464, and Ian Tyrrell, “Reflections on the Transnational Turn in United States History: Theory and Practice,” *Journal of Global History* Vol. 4, Iss. 3 (November 2009): 453-474.

<sup>12</sup> For sports, see for example Rydell and Kroes, *Buffalo Bill in Bologna*, Zeiler, *Ambassadors in Pinstripes*, and Theresa Runstedtler, *Jack Johnson, Rebel Sojourner: Boxing in the Shadow of the Global Color Line*, (Berkeley: University of California Press, 2012). For sailors, see Brian Rouleau, *With Sails Whitening Every Sea: Mariners and the Making of an American Maritime Empire*, (Ithaca: Cornell University Press, 2014). For businessmen, see Emily S. Rosenberg, *Financial Missionaries to the World: The Politics and Culture of Dollar Diplomacy, 1900-1930*, (Cambridge: Harvard University Press, 1999), Mona Domash, *American Commodities*, Jenifer Van Vleck, *Empire of the Air: Aviation and the American Ascendancy*, (Cambridge: Harvard University Press, 2013), and Victoria de Grazia, *Irresistible Empire: America’s Advance Through Twentieth-Century Europe*, (Cambridge: Belknap Press, 2005). For tourists, see Nolan, *Visions of Modernity*, and Brooke Blower, *Becoming Americans in Paris: Transatlantic Politics and Culture between the World Wars*, (New York: Oxford University Press, 2011).

<sup>13</sup> Julia Irwin, *Making the World Safe: The American Red Cross and a Nation’s Humanitarian Awakening*, (New York: Oxford University Press, 2013), de Grazia, *Irresistible Empire*, Van Vleck, *Empire of the Air*.

<sup>14</sup> Andrew Zimmerman, *Alabama in Africa: Booker T. Washington, the German Empire, and the Globalization of the New South*, (Princeton: Princeton University Press, 2010), Julie Green, *The Canal Builders: Making America’s Empire at the Panama Canal*, (New York: The Penguin Press, 2009), Runstedtler, *Jack Johnson*.

outcome of the Civil War, and even the very essence of what it means to be an American, were influenced and shaped by outside perceptions of the United States.<sup>15</sup>

Although a majority of scholars of the transnational United States have focused on the late nineteenth and twentieth centuries, recent years have seen the publication of a growing number of transnational histories of the mid-nineteenth-century United States, as historians in a variety of subfields have explored the multifaceted ways the United States has interacted with and been reshaped by the outside world in the antebellum period. Groundbreaking studies on the transnational aspects of slavery, racial thinking, and the southern economy like Mathew Karp's *This Vast Southern Empire*, Edward Rugemer's *The Problem of Emancipation*, and Sven Beckert's *Empire of Cotton* demonstrate the necessity of analyzing the larger world in which the American South was embedded.<sup>16</sup> Works like Emily Conroy-Krutz's *Christian Imperialism*, Brian Rouleau's *With Sails Whitening Every Sea*, and Aims McGuinness' *Path of Empire* belie older depictions of the antebellum United States as parochial and focused on westward expansion and internal development, instead painting a picture of a vibrant, even straining nation reaching out moralistically, diplomatically, and economically into all corners of the globe.<sup>17</sup> New historical actors, from southern racial theorists and transcontinental railroad boosters to Pacific sailors and Christian missionaries, fill the pages of these histories and reveal how integral the outside world was in shaping the antebellum United States. Over the last several years, these and other studies have shown is that it is impossible to understand the history of the United States in

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<sup>15</sup> Don Doyle, *The Cause of All Nations: An International History of the American Civil War*, (New York: Basic Books, 2015), Blower, *Becoming American in Paris*.

<sup>16</sup> Matthew Karp, *This Vast Southern Empire: Slaveholders at the Helm of American Foreign Policy*, (Cambridge: Harvard University Press, 2016), Edward Bartlett Rugemer, *The Problem of Emancipation: The Caribbean Roots of the American Civil War*, (Baton Rouge: Louisiana State University Press, 2008), Sven Beckert, *Empire of Cotton: A Global History*, (New York: Knopf, 2014).

<sup>17</sup> Emily Conroy-Krutz, *Christian Imperialism: Converting the World in the Early American Republic*, (Ithaca: Cornell University Press, 2015), Rouleau, *With Sails Whitening*, Aims McGuinness, *Path of Empire: Panama and the California Gold Rush*, (Ithaca: Cornell University Press, 2008).

the antebellum period without analyzing the complex set of interactions that defined the relationship between the United States and the wider world.<sup>18</sup>

Like these transnational histories, my dissertation takes interactions between the United States and the outside world as its focal point. I examine European travelers to the United States, the international careers of American businessmen, and conversations about the changing place of the United States in the world in order to show how these exchanges reshaped the way the young nation interacted with and was interpreted in the wider world. Transnational events like the 1851 Crystal Palace Exhibition in London, which brought together the industrial and artistic creations of nations from all over the world under one glass roof, offer a valuable window to investigate the role of the United States in the wider industrializing world. As my analysis of this event—the subject of chapter 2—will show, the United States’ performance at the Crystal Palace triggered a cascade of events, including Parliamentary hearings and transatlantic voyages of British engineers, which ultimately initiated a sharp reversal in the flow of technology across the Atlantic, as Europeans began to realize mechanics and entrepreneurs in the United States were pioneering new methods of production.

My dissertation also reinforces the point made by many of these antebellum transnational histories that the United States was not simply pursuing a continental and westward direction of empire prior to the Civil War, but was in fact expanding overseas in all directions, and in new and innovative ways. Paralleling McGuiness’s *Path of Empire*, which looks at events in Panama

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<sup>18</sup> Other transnational histories of this period include Timothy Mason Roberts, *Distant Revolutions: 1848 and the Challenge to American Exceptionalism*, (Charlottesville: University of Virginia Press, 2009), David Sim, *A Union Forever: The Irish Question and U.S. Foreign Relations in the Victorian Age*, (Ithaca: Cornell University Press, 2013), Brian Schoen, *The Fragile Fabric of Union: Cotton, Federal Politics, and the Global Origins of the Civil War*, (Baltimore: Johns Hopkins University Press, 2009), and Robert E. May, *Manifest Destiny’s Underworld: Filibustering in Antebellum America*, (Chapel Hill: University of North Carolina Press, 2009), Brian DeLay, *War of a Thousand Deserts: Indian Raids and the U.S.-Mexican War*, (New Haven: Yale University Press, 2008), Jay Sexton, *The Monroe Doctrine: Empire and Nation in Nineteenth-Century America*, (New York: Hill and Wang, 2011).

surrounding the construction of the transcontinental railroad there by an American company in the 1850s, I examine American railroad boosters in both the United States and Russia in chapter 4, exploring how their vision of the world and the United States' place in it led them to encourage—and at times demand—a more active role of their nation in other regions, from Native American reservations to Russian Alaska. Similarly, a close analysis of the international business career of Samuel Colt, the subject of chapter 3, reveals how central the penetration of the markets of the world by his product was to his vision of his company and his nation. The innovative advertising practices Colt pioneered, such as depicting his firearm being demonstrated to spear-wielding Amazonian tribes, normalized the expansion of American industrial capitalism and set a pattern of future multinational corporate advertising that resonated for decades. Rather than being content with continental expansion, in the 1850s a diverse set of actors, from railroad boosters to businessmen, thus expanded U.S. power and influence out into the world while reshaping the way that both Americans and non-Americans alike interpreted the place of the young nation on the world stage.

My work also builds upon the recently revitalized subfield of nineteenth-century economic history. Like recent transnational scholarship, these new histories of early American capitalism examine a more diverse set of historical actors, like counterfeiters, “deadbeats,” and insurance peddlers, to re-examine the social and cultural foundations of American capitalism.<sup>19</sup> Whether analyzing con men or slaveowners, these works challenge older descriptions of the United States that describe a relatively static nation making the slow transition to a market

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<sup>19</sup> See, for example, Sven Beckert and Christine Desan, ed., *American Capitalism: New Histories*, (New York: Columbia University Press, 2018). Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America*, (Cambridge: Harvard University Press, 2012), Stephen Mihm, *A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States*, (Cambridge: Harvard University Press, 2007), Scott Reynolds Nelson, *A Nation of Deadbeats: An Uncommon History of America's Financial Disasters*, (New York: Knopf, 2012), Michael Zakim and Gary J. Kornblith, ed., *Capitalism Takes Command: The Social Transformation of Nineteenth-Century America*, (Chicago: University of Chicago Press, 2012).

economy in the antebellum years.<sup>20</sup> Instead, recent scholarship portrays a dynamic economic period full of innovations, risks, and deep global entanglements. Rather than keeping capitalism at bay, in the decades leading up to the Civil War southern slaveholders relentlessly increased the productivity of their slaves and engaged in and invigorated larger networks of capitalist economic exchange in the northeastern United States and Europe.<sup>21</sup> In the antebellum period insurance companies, bankers, and a whole host of less respectable actors pioneered new financial practices that entangled average Americans in every tightening networks of economic exchange. My work reinforces these descriptions of the United States. In the decade prior to the Civil War, European observers were often shocked by the economic and industrial developments they found transforming the United States.<sup>22</sup> And Samuel Colt, as well as a host of international American businessmen like him, pioneered and popularized new production methods and advertising practices during this period and took them out into the world in new and innovative ways.<sup>23</sup> Rather than depicting the economic development of the nineteenth century as a slow transition to a market economy, largely dependent on British technological improvements, before a sudden “leap to industrial dominance after the 1890s,” my dissertation builds on these new economic histories to tell the story of a dynamic and innovative antebellum economy that set the stage for larger economic changes in the late-nineteenth and early-twentieth centuries.<sup>24</sup>

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<sup>20</sup> See, for example, Charles Sellers, *The Market Revolution, Jacksonian America, 1815-1846*, (New York: Oxford University Press, 1991), and Walter Licht, *Industrializing America: The Nineteenth Century*, (Baltimore: The Johns Hopkins University Press, 1995).

<sup>21</sup> For the intersection of capitalism and American slavery, see, for example, Edward Baptist, *The Half Has Never Been Told: Slavery and the Making of American Capitalism*, (New York: Basic Books, 2014), and Sven Beckert and Seth Rockman, ed., *Slavery's Capitalism: A New History of American Economic Development*, (Philadelphia: University of Pennsylvania Press, 2016).

<sup>22</sup> These observations, and the shock at what they called the “progress” of the United States, is the subject of Chapter 1.

<sup>23</sup> These claims will be fleshed out in Chapters 2 and 3.

<sup>24</sup> Quote from Kevin H. O'Rourke and Jeffrey G. Williamson, *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, (Cambridge: The MIT Press, 1999).



As the foregoing paragraphs allude to, I explore these issues through four case studies that each center on “the long 1850s,” the period from the end of the Mexican-American War in 1848 through the onset of the Civil War in 1861. The four chapters are not organized chronologically. Rather, each incorporates a different focus on the changing place of the United States in the world during this roughly thirteen-year period. Each of these chapters can thus be read as stand-alone studies, yet their whole is also greater than the sum of their parts. Taken together, these four chapters overlap and reinforce one another, collectively painting a clearer and more nuanced picture of the seminal transition in how the United States interacted with the wider world during the long 1850s.

The first chapter revolves around European travel writing. As the cost of tourism fell with the proliferation of oceanic steamships and railroads, travel narratives boomed in popularity in mid-nineteenth century Europe. Authors ranging from Charles Dickens to the Michel Chevalier to member of the British nobility published accounts of their travels across the United States. As travel books proliferated, so too did a pattern about how Europeans talked about the rapidly growing young nation. Rather than depicting the United States as a curious Republican experiment or a backward country of tobacco-spitting farmers, as had many earlier descriptions of the young nation, Europeans writing in the decade after the Mexican-American War began to emphasize the tremendous demographic growth, widespread mechanization in the economy, and the rapid interconnectedness achieved by the steam engine. At the same time, they increasingly began to label these changes under the umbrella term “progress.” Furthermore, they began to recognize the same processes that were transforming the United States so rapidly were also reshaping Europe, if with less speed and dynamism. After traveling across the United States in 1855, the Scottish businessman William Baxter wrote, “Standing on American ground, I think of

the future.”<sup>25</sup> The realization that the tremendous changes that were reshaping the United States could offer a glimpse into the future of Europe first drew Europeans’ attention in the 1850s. While this realization would reemerge in the early 1900s in works like H.G. Wells’ *The Future in America* and Stead’s *The Americanization of the World*, it was in the 1850s, this chapter demonstrates, that Europeans began to appreciate and discuss the United States in ways that would define those conversations for the next century and a half.

The second chapter begins with American involvement in the world’s first international fair, the Crystal Palace Exhibition, held in London in the summer and fall of 1851. While initially derided by the British press, by the end of the exhibition American contributions like McCormick’s reaper and Colt’s revolver had generated significant praise from an impressed European audience. But the exchanges did not stop with the conclusion of the exhibition. As the chapter goes on to explore, a set of transatlantic technological flows followed in the exhibition’s wake. On the one hand, the British government was so stunned by American technological accomplishments that it sent numerous engineering commissions West across the Atlantic to study the manufacturing techniques of American engineers and mechanics. On the other hand, American businessman like Samuel Colt, Cyrus McCormick, and Alfred Hobbes travelled across the Atlantic in the opposite direction as they brought their inventions and machinery to Europe in order to capitalize on the attention raised by the exhibition. This Crystal Palace Exhibition thus marked a watershed moment, launching a major reversal in a flow of technology which up to that point had moved from Great Britain to the United States. The new direction in this flow of technological innovation, which first appeared in the 1850s, would only continue to grow as the

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<sup>25</sup> William Edward Baxter, *America and the Americans*, (London: Geo Routledge & Co.,1855), 17.

United States solidified its place as the world's foremost industrial economy in the late-nineteenth century.

The third chapter turns to a close analysis of the career of Samuel Colt, who first earned international attention at the Crystal Palace in 1851. Rather than tell a traditional business history of Colt's revolving firearms, the chapter focuses on the lesser known international aspects of Colt's career. These international dealings conveniently parallel the long 1850s with his first successful sales to the American government during the Mexican-American War through his death in January 1862, shortly after the outbreak of the Civil War. During this period, Colt came to represent a new type of American international businessman. While Americans had sent products around the world since the creation of the country in the 1770s, they mostly traded in raw materials like cotton, wheat, or ice. But by the 1850s, American engineers had pioneered new, more precise machinery and production methods that surprised Europeans at the Crystal Palace, Colt's revolver chief among them. Much like Henry Ford in the early twentieth century or Steve Jobs in the early twenty-first, Colt represented the pinnacle of technological innovation on the world's stage during the 1850s. Building on the work of Kristin Hoganson, this chapter also examines how Colt's identity and business practices were reshaped by the wider world.<sup>26</sup> From the Russian minarets that adorned the roof of his mansion to the Turkish dress he occasionally adorned at local social events, Colt's relationship with the world was not simply defined by one-sided domination, but was rather informed by mutual exchange and influence.

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<sup>26</sup> In her landmark study *Consumers' Imperium*, Hoganson persuasively argues that portraying a monolithic United States, isolated from outside influence, going out to remake the world in its own image, is fundamentally flawed. As she illustrates, the United States was being culturally transformed by the outside world in the post-Civil War era. My analysis of Colt reinforces this contention and illustrates the roots of this mutual influence go back to the antebellum period. Economic ascendancy did not equal cultural isolation and superiority. On the contrary, Colt's deep entanglements with the wider world reshaped both his business practices and his cultural sensibilities.

The fourth chapter approaches the same set of topics from a final angle by examining national conversations about the geographic and geopolitical place of the United States in the world. Following the tremendous western land acquisition that followed the Mexican-American War in 1848, many Americans began to re-envision their understanding of continental, hemispheric, and global geography. Rather than seeing the United States as occupying a vast, uncharted continent to the east of Europe, they began to imagine the United States at the center of the world, flanked by two oceans and uniquely positioned as a new midpoint between the world's commercial centers, Europe and Asia. This new geographic understanding formed the foundation of a whole set of policy directives and infrastructure developments, from a more robust stance against British interests in the Caribbean to the funding of a massive transcontinental railroad. While the decade was scarred by bloody domestic debates over the place of slavery in the nation, members from both sides of the aisle agreed on the importance of developing the new global scope of American power, and acted on these shared commitments by funding exploratory expeditions in the Pacific or further linking California to the east coast of the United States. While these global perspectives were largely overshadowed by the fierce political and sectional rivalries that ultimately led to the Civil War, they would reemerge in the coming decades and serve as the foundation of a more robust American foreign policy in the 1890s.

Taken as a whole, these four chapters depict a nation entering the world stage in new ways during the 1850s. The events that unfolded in transnational spaces like the Crystal Palace Exhibition, as well as the firsthand accounts of curious travelers, brought to Europe's attention the growing power and influence of the United States. At the same time, American businessman like Samuel Colt went out into the world representing this power and technological expertise. All the while, Americans from across the political spectrum began to imagine themselves at the

center of the earth, destined to play a robust role in the unfolding of history. Together, all of these developments make the 1850s a transitional period in the history of the United States, as the changes that redefined the nation's place on the world stage would only be amplified in the decades to come. In this light, it is noteworthy that the central point of Stead's *The Americanization of the World* was not to alert Europeans to some looming, future American invasion. The battle, Stead argued, was already over, with 1901 only marking the culmination of a decades-long process. What follows is an examination of the origins of this process, a story of the antebellum roots of the Americanization of the World.

## Chapter One: European Observations of the United States

In early August of 1853, the Scottish businessman and travel writer William Edward Baxter arrived in New York City to begin an extended tour of the United States. Over the next six months Baxter crisscrossed the nation, traveling from Niagara Falls in the north to New Orleans in the south, from Detroit and Chicago on the Great Lakes to Savannah and Norfolk on the Atlantic. Even though he was only twenty-eight at the time, Baxter had already journeyed widely in Europe. His *Impressions of Southern Europe* was published in 1850, and his *The Tagus and the Tiber, or Notes of Travel in Portugal, Spain, and Italy* was released two years later. While approaching Long Island on a hot August day, Baxter was moved to reflect upon the differences between his current journey and his past European travels. “Standing on the cliffs of Castellamare, or watching the Adriatic’s waves as they roll gently in upon the Lido at Venice,” Baxter explained, “I think of grandeur past and gone, of power long since crushed.”<sup>27</sup> But “the lakes and rivers of the New World call forth very different emotions than these,” he continued. “Standing on American ground I think of the future.”<sup>28</sup>

Like Baxter, during the 1850s many European observers of the United States were inspired to “think of the future.” While travel accounts of the early-nineteenth century typically depicted a young nation populated by farmers and restless pioneers, in the 1850s many Europeans began to reexamine “Brother Jonathan” across the Atlantic. What emerged was a new genre of writing about the United States. While older themes such as the meaning of democracy or the lack of American manners still persisted, in the 1850s these more culturally focused questions were largely subsumed under a new emphasis on economics, commerce, and what

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<sup>27</sup> William Edward Baxter, *America and the Americans*, (London: Geo Routledge & Co., 1855), 16.

<sup>28</sup> *Ibid.*, 17.

began to be called “progress.” Europeans zig-zagged across the United States, visiting factories in the Northeast, riding on the ubiquitous Mississippi steamers, and documenting all they could gather. They cited census data on population growth, import and export statistics, production figures of American factories, and rail and telegraph mileage. While conservatives still warned of the dangers of democracy and liberals decried the evils of slavery, Europeans across the political spectrum used a wealth of statistics to quantify and dissect the vast economic developments—the “progress”—of the United States.

While many European travelers reported being astonished by what they found in the United States, these same observers often warned their fellow Europeans of its swiftly growing power. In the rapidly interconnecting world of the mid-nineteenth century, many observers began to realize that changes they witnessed across the Atlantic were already impacting Europe. Presaging the cries of “Americanization” at the turn of the twentieth century, they consistently counseled their audiences to pay attention to developments across the Atlantic. While some advised their governments to send engineers to study American factories, others called on political economists to analyze the impact of the lack of internal tariffs on American domestic trade. Citing a wealth of statistics and personal observations, travelers of the 1850s highlighted the phenomenal “progress” of the United States and encouraged their fellow Europeans to seriously grapple with its rising global power.

Despite their heavy use of statistics and claims of objectivity, European travel writers like Baxter were not simply producing fact-based accounts of American progress; they were establishing new frameworks for thinking and talking about the United States and the world. Their accounts played a seminal role in highlighting the economic and commercial expansion of the United States. They also drew attention to larger processes of industrialization and deepening

global interconnections that transcended individual nation-states. Ultimately, these writers redefined the way both the United States and the world were talked about in European discussions of the mid-nineteenth century.

### A New Rate of Progress

Like Baxter, the Scottish newspaper publisher William Chambers journeyed across the Atlantic. In September of 1853, Chambers boarded the steamer *America* bound from Liverpool to Boston. Arriving in Boston exhausted after a fourteen-day voyage that “was rather more rough than usual,” Chambers was excited to experience the “extraordinary hotel system” of the United States.<sup>29</sup> While even the largest hotels in Europe had only a few dozen rooms, Chambers noted in amazement the Revere House in Boston “consisted of several hundred apartments.”<sup>30</sup> The next day he was again on the move, headed west on a railroad for Albany. “All was novel” in the experience, he reported. Chambers was shocked when he realized the track was not fenced in, as was common in Great Britain. In small towns, rail lines crossed with central roads and other tracks “with no other trace of protection for the public,” Chambers recorded in disbelief, “than the very useful piece of advice—‘Look out for the locomotive when the bell rings!’”<sup>31</sup>

Chambers stayed on the move for most of his four-month trip, visiting Detroit, Chicago, Lowell, Philadelphia, Washington, D.C., and Richmond. In Cincinnati—or “Porkopolis,” as it became known in the 1830s—he described huge five-story buildings designed to slaughter and process hogs.<sup>32</sup> Departing from Cincinnati, Chambers took the rail north through Buffalo to New

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<sup>29</sup> William Chambers, *Things As They Are in America*, (Philadelphia: Lippincott, Grambo, & Company, 1854), 18, 47.

<sup>30</sup> *Ibid.*, 47.

<sup>31</sup> *Ibid.*, 48.

<sup>32</sup> *Ibid.*, 156.



York City. While impressed by the size and elegance of the famous Astor House, he was less enamored by the cleanliness of the streets. Perhaps holding his tongue—and his nose—Chambers wrote he was “sorry to hint that New York is, or at least *was* during my visit, not so cleanly as it might be.” Surely this was putting it mildly. “The mire was ankle-deep in Broadway,” he confessed, “and the more narrow business streets were barely passable.”<sup>33</sup> Leaving the filth of New York City behind, Chambers departed for Great Britain in mid-December. Once home, he set about turning his extensive notes into a book. *Things As They Are In America* was published with the London based printing house he co-owned with his brother, W. & R. Chambers, in the summer of 1854.

*Things As They Are* was just one in a flood of travel narratives published in the 1850s. Like Chambers, Richard Watkin, an assistant manager of the London and Northwestern Railway Company, described the novelties of American railroads in *A Trip to the United States and Canada*, published in 1852. Lauchlan Mackinnon, a Captain in the Royal Navy, paid special attention to American dockyards in his *Atlantic and Transatlantic: Sketches Afloat and Ashore*, in the same year. Guillaume Tell Poussin, a French engineer and ambassador to the United States, traveled widely before publishing *The United States; Its Power and Progress* in 1851. The Scottish businessman William Edward Baxter journeyed nearly six months before releasing *America and the Americans* in 1855. James Phillippo, a British missionary based in Jamaica, published *The United States and Cuba* in 1857. In 1859 Aleksandr Lakier, a civil servant with a Master’s degree in history, became the first Russian to publish a travel narrative of the United States, which he titled *The Travel Through North American States, Canada, and Cuba*. The authors of these seven works—five Brits, a Frenchman, and a Russian—followed different paths,

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<sup>33</sup> Ibid., 192.

yet they all noticed similar developments that went underappreciated by their predecessors. As Baxter explained, “These modern observers of American manners and progress have arrived at very different conclusions from those superficial writers who, formerly, circulated in Great Britain mere caricatures.”<sup>34</sup> While European travel writers of the 1850s still complained about the filthiness of New York City and the boorishness of tobacco spitting, these criticisms were largely subsumed under a new emphasis on American economic growth and what began to be called “progress.”

In the early-nineteenth century, progress simply meant to move from one location to another, but the word gained new meaning as the Industrial Revolution picked up momentum. Contemporaries began to use progress as a sort of umbrella term to encapsulate a diverse set of economic and social changes.<sup>35</sup> Under this new meaning, progress was defined by the spread of railroads and steamboats, rapid population growth, and the increased mechanization of production. Change was no longer feared but rather celebrated as the triumphal march of further technological improvements. While Great Britain still claimed leadership as the “workshop of the world,” the diffusion of steam engines and mechanized textile production across Europe and North America confirmed that “progress” was spreading.

As the early-nineteenth century wore on, contemporaries began to perceive that progress was not spreading evenly; rather, it was transforming some places more extensively than others. In the 1820s and 1830s European observers noticed the adoption of railroads and textile machinery in factory towns sprouting up in the northeast. While the mills of Lowell, Massachusetts were in some ways unique for their dependence on a highly educated female labor

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<sup>34</sup> Baxter, *America and the Americans*, 8.

<sup>35</sup> This discussion of progress is deeply indebted to Joyce Appleby, *The Relentless Revolution: A History of Capitalism*, (New York: W.W. Norton & Company, Inc., 2010), 164-167.

force, for the most part the factories of the Northeast were largely indistinguishable from the factories of northern France or the Netherlands. In the 1850s, though, many Europeans began to recognize that the United States was being transformed by the Industrial Revolution in distinct and significant ways. As the railroad expert Edward Watkin announced in his travel narrative of the United States, “a new rate of progress” was sweeping across the United States.<sup>36</sup> Progress became a sort of catchword in the travel writing of the 1850s under which a new formula emerged. This formula was built upon three main categories: the proliferation of railroads and steamboats, the growth of population and its expansion west, and the mechanization of the American economy. While a rapid increase in one of these categories was significant in its own right, it was their combination that gave the term its new potency.

### *America By River and Rail*<sup>37</sup>

The vast transportation infrastructure of the United States was a central ingredient in Europeans’ definition of American “progress.” While locomotives were invented in Great Britain in the early 1800s, by the 1830s they had spread to Belgium, France, Germany, Canada, and the United States. As the most visible representation of the Industrial Revolution, the “Iron Horse,” as locomotives became known during the period, embodied modern technology and travel. Steamboats first came into wide usage during the mid-nineteenth century as well. Like the railroads, they revolutionized transportation and cut travel time by as much as two-thirds. By the 1850s, steamboats plied the Bay of Bengal and railroads dotted the coastlines of Peru, South Africa, and Egypt. While Europeans’ recognized these technologies were diffusing around the

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<sup>36</sup> Edward W. Watkin, *A Trip to the United States and Canada: In a Series of Letters*, (London: W.H. Smith & Son, 1852), 144.

<sup>37</sup> William Ferguson, *America By River and Rail: Notes by the way of the New World and its People*, (London: James Nisbet and Co., 1856).

globe, many also began to realize they were spreading faster in the United States. Because they represented the pinnacle of modern technology, observations of their ubiquity in the United States were more than about railroads or steamboats. They became an integral ingredient in the definition of American “progress.”

“The number of railways in these states [New England], and also in Pennsylvania, surprises every traveler from Europe,” William Chambers reported. “They are seen radiating in several directions from every city” and are “now an extraordinary feature of the United States.”<sup>38</sup> The Russian traveler Aleksandr Lakier reported being “dazzled by the network that covers the eastern” states. “There is no country except America,” he asserted, “where one could have hoped for so rapid an increase.”<sup>39</sup> William Baxter alerted his audience to “the rapidity with which railroads have of late years been formed from place to place throughout the United States.”<sup>40</sup> Professor Philip Kelland, a mathematician on a ten-week lecture tour of the United States in 1858, was amazed at the density of railroads in the west. “When I see radiating from a little town in the heart of a vast desert,” Kelland explained, “I may well exclaim, ‘Where did the money come from!’” Travel writers employed emotional terms like “surprises,” “extraordinary,” and “dazzled” over and over again to impress upon their audience the speed and extent of developments across the Atlantic.

While European observers of the 1850s infused their writing with emotive language, they also employed more statistics than their predecessors of the early-nineteenth century. While visiting Illinois, Lakier documented that “whereas in 1851 not a single rail had yet been laid,

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<sup>38</sup> Chambers, *Things As They Are*, 323.

<sup>39</sup> Aleksandre Lakier, Arnold Schrier, and Joyce Story, *A Russian looks at America: the journey of Aleksandr Borisovich Lakier in 1857; translated from the Russian and edited by Arnold Schrier, Joyce Story; foreword by Henry Steele Commager; introduction by Arnold Schrier*, (Chicago: University of Chicago Press, 1979), 40.

<sup>40</sup> Baxter, *America and the Americans*, 42.

there are now 2,215 miles of railroad in this new state.” He would go on to present decade by decade statistics of national rail construction since the 1820s. “By 1850 the figure had grown to 7,355 and since then, that is, in some seven years, railroads have quadrupled to no less than 30,000 miles.”<sup>41</sup> The railroad expert Richard Watkin took up nearly ten pages meticulously detailing miles of track, the weight of freight, the value of goods transported, and the average number of passengers transported on American railroads. “Some of the railway enterprises now in hand in the States are truly grand conceptions,” Watkin informed his readers.<sup>42</sup> James Phillippo documented that “within ten years” of the first railroads in the late 1820s, “the length has been quadrupled, and since 1850, trebled. The annual increase,” Phillippo continued, “has been in a progressive ratio; and this increase promises to continue, there being now at least 6,000 miles in process of construction.”<sup>43</sup> Chambers announced that “It is anticipated that, previous to the year 1860, there will be completed within the limits of the United States at least 35,000 miles of railway.”<sup>44</sup> The pattern of documenting rail mileage can be found in nearly every travel narrative of the period. Combined with emotionally charged language like “dazzled” and “extraordinary,” the excessive use of statistics drove home the point that things were changing faster in the United States than in other regions of the world.

The ubiquity of steam ships on American rivers also shocked European observers in the 1850s. James Phillippo recorded in amazement that the “Mississippi and its tributaries alone are traversed by upwards of 600 steamboats, all of which make several voyages a year.”<sup>45</sup> Lakier recounted being struck by wonder while riding up the Hudson in summer of 1857. “Everything I

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<sup>41</sup> Lakier, *A Russian Looks at America*, 171.

<sup>42</sup> Watkin, *A Trip to the United States*, 126.

<sup>43</sup> James M. Phillippo, *The United States and Cuba*, (London: Pewtress & Co., 1857), 79.

<sup>44</sup> Chambers, *Things As They Are*, 324.

<sup>45</sup> Phillippo, *The United States and Cuba*, 77.

read in guidebooks and hear in stories about American steamships was as nothing in comparison with what I found on the steamship *Empire City*.”<sup>46</sup> He was most impressed with the sheer size of the vessel, which was over three stories tall, far larger than most European steamships of the period. “In a burst of awe,” Lakier remembered, “I remarked almost to myself: ‘What would the savage Indians who lived along this coast two hundred years ago have said if they had seen such a wonder!’”<sup>47</sup>

It wasn’t simply the number or size of American steamers that impressed these observers, but rather the complementary position of them parallel to an extensive rail network in improving transportation and encouraging commerce. Pouisson contended “the establishment of channels affording facilities for rapid communication was essential to the commercial progress of the United States.”<sup>48</sup> He also highlighted the complementary nature of the two technologies. “The steamboat,” he wrote, “especially serves as a connecting link between various points on the railroad.”<sup>49</sup> William Ferguson alluded to these connections in the title to his book: *America by River and Rail*. Over and over, travelers like Edward Watkin described going from “the steamship to the railroad” or vice versa in the course of their journeys. He wrote in his Introduction that “everyone should know how easy it is... to travel in the United States.”<sup>50</sup> The high density of steamships and rail inspired Pouisson to argue that “in no country has an equal degree of activity and constant application been exhibited with the object of procuring means of exchange.”<sup>51</sup>

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<sup>46</sup> Lakier, *A Russian Looks at America*, 60.

<sup>47</sup> *Ibid.*, 61.

<sup>48</sup> Guillaume Tell Pouisson, *The United States: Its Power and Progress*, (London: Thomas Delf, 1851), 373.

<sup>49</sup> *Ibid.*, 351.

<sup>50</sup> Watkin, *A Trip to the United States*, viii.

<sup>51</sup> Pouisson, *The United States*, 371.

As this statement indicates, during the 1850s European travelers to the United States first began to recognize that “no country” had as dense and modern a transportation infrastructure as the United States. While this assertion is bold, it is difficult to prove. National comparisons of rail mileage, for example, are inherently misleading because of the different size of various nation-states. While the United States had over three times the rail mileage of Great Britain by the end of the 1850s, Great Britain was less than a twentieth the size of the United States.<sup>52</sup> Does this mean Great Britain had more rail mileage than the United States per square mile? Certainly, but on the other hand, much of U.S. territory was recently acquired from Mexico and thus thinly settled, and the South adopted the railroad much slower than the North. Than did the North have a comparable density of railroads to Great Britain? Perhaps, but one could point to the same geographic disparities of regions in Great Britain, like the lack of extensive railroads in Ireland or Wales. Thus it is difficult, if not impossible, to compare the transportation infrastructures of different nation-states using statistics alone.

Yet, comparison is not the point. The reflections of these travel writers on the rapidity and scale at which railways were being constructed in the United States do not prove that the United States had more a more extensive transportation infrastructure than Great Britain, or France, or any other region. Rather, the ubiquity of statements like these demonstrate that Europeans *thought* the United States did. They form a clear pattern in the travel writing of the 1850s. European observers were consistently struck by the density of the transportation infrastructure of the United States and the rate at which it was expanding. These accounts are all the more significant in that most of their authors were well-travelled in Great Britain and Europe. Yet over and over again they pointed to the “extraordinary” features and “truly grand

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<sup>52</sup> Edward J Davies, II, *The United States in World History*, (New York: Taylor & Francis Inc., 2006), 76.

conceptions” of American growth. Because they represented the pinnacle of technology, discussions of American railroads and steamboats were about more than iron tracks and wooden boats. They became an important ingredient in the larger project of describing and analyzing the “progress” of the United States.

### A Spectacle Without Parallel<sup>53</sup>

Along with a dense transportation infrastructure, the high rate of population growth in the United States consistently impressed European observers. In one sense this was not entirely new; population growth had been a central theme in European conversations about the United States since the 1780s. But in the mid-nineteenth century, population growth was not discussed as some distant element of American power but rather as an essential component of the nation’s growing economic strength. In the 1850s European immigration to the United States expanded dramatically, reaching nearly half a million in the year 1855 alone. By the end of the decade the nation’s population surpassed Great Britain’s. With the annexation of the western portion of the continent following the end of the Mexican-American War in 1848 and the rapid expansion of railroads to the west, the possible demographic expansion of the United States appeared nearly limitless. In this context, population growth, especially across the west, became a key ingredient in Europeans’ definition of American “progress.”

In his travel narrative, Watkin set out immediately to describe the geographic and demographic expansion of the United States. In his Introduction he wrote, “It now comprises twenty-nine states; without reckoning the new dominions of Oregon, California, New Mexico, and Texas. Ten years ago,” he continued, “its area was 2,000,000 square miles. That area has

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<sup>53</sup> Pouisson, *The United States*, 428.



become in 1850 3,252,689.” Using federal census data, Watkin reported: “Its population in 1790 was less than 4,000,000; in 1840 it stood at 17,000,000; it is now 25,000,000.”<sup>54</sup> Pouisson compared this increase to other European nations. “At the close of the last century, the population of the United States was less than four millions, somewhat below that of Belgium. At the present time,” Pouisson continued, “it is at least twenty-one millions, exceeding that of Great Britain. It has therefor quintupled in less than half a century.... a spectacle which well deserves the attention of political economists.”<sup>55</sup>

Travelers also meticulously documented the population of specific cities and regions. Baxter, who visited the United States briefly in 1846 before the more extended trip he based his travel narrative on between 1853 and 1854, reported, “I was astonished at the changes which had taken place in the appearance of many of the cities in seven years. Whole districts of New York were entirely new,” Baxter testified in amazement.<sup>56</sup> While observers repeatedly documented population growth in the major Eastern cities of Washington D.C., Baltimore, Philadelphia, and Boston, they wrote most enthusiastically about the growth of urban centers further west. Baxter informed his readers of the “unprecedentedly rapid rise of some new cities in the north-western States.”<sup>57</sup> He travelled through Cincinnati, St. Louis, and Detroit before arriving at Chicago. “Many Americans, even when I first visited the States in 1846, had never heard of it,” Baxter reported. “In 1854,” he continued, “I found it a city of 60,000 inhabitants.”<sup>58</sup> By the end of the 1850s the growth of Chicago had nearly become a legend. “I first heard about the city aboard the steamship that carried me across the Atlantic,” Lakier recalled. His imagination was so

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<sup>54</sup> Watkin, *A Trip to the United States*, ix.

<sup>55</sup> Pouisson, *The United States*, 428.

<sup>56</sup> Baxter, *America and the Americans*, 110.

<sup>57</sup> *Ibid.*, 240.

<sup>58</sup> *Ibid.*, 242.

“electrified by constant tales of the speed with which Chicago has prospered” that he hardly knew what to expect.<sup>59</sup> Upon arriving, he “set out for a bookstore to buy a guide book with which to acquaint myself with the city.” Lakier was surprised when the bookseller expressed fear that the guidebook might be out of date, even though it was published only a few months before. “At first I thought he was joking,” Lakier recounted. “But not at all. He unfolded the map and showed me streets that did not exist when the map was printed, but where now there was a large population.”<sup>60</sup> Professor Phillip Kelland, a British mathematician on a nine-month speaking tour of the United States, described Chicago “rising out of the dust... as if some modern Aladdin had brought Venice from its ocean home, and tumbled it down on the prairie.”<sup>61</sup> Further west, the rapid population growth of Wisconsin astounded European observers. “Wisconsin was admitted as a State of the Union in 1848,” Watkin reported. “It has risen up with a rapidity astonishing even in America.”<sup>62</sup> Captain McKinnon also pointed to the “extraordinary progress of Wisconsin.” He reported in near disbelief that “while only 30,000 in 1840,” its population “is now estimated at nearly half a million.”<sup>63</sup> Phillippo echoed these points. “Among evidences of extraordinary progress in the Western States,” he explained, “it will only be necessary to refer to Wisconsin.”<sup>64</sup>

Like their observations of the United States’ transportation infrastructure, European travelers mixed emotional descriptions of being “astonished” and “electrified” with detailed economic statistics. Sometimes these accounts took on a near mystical tone. “Where forests once

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<sup>59</sup> Lakier, *A Russian Looks at the United States*, 174.

<sup>60</sup> *Ibid.*, 175.

<sup>61</sup> Phillip Kelland, *Transatlantic Sketches*, (Edinburgh: Adam and Charles Black, 1858), 48.

<sup>62</sup> Watkin, *A Trip to the United States*, 62.

<sup>63</sup> Lauchlan Bellingham Mackinnon, *Atlantic and Transatlantic: Sketches Afloat and Ashore*, (New York: Harper & Brothers Publishers, 1852), 133.

<sup>64</sup> Phillippo, *The United States and Cuba*, 326.

stood,” Phillippo reported, “cities are reared as by magic.”<sup>65</sup> In the United States, Pouisson wrote, “cities have risen as by enchantment.”<sup>66</sup> With multiple pages of graphs and statistics, he notified his readers that even after accounting for immigration, “the United States still presents a proportional increase to which nothing in Europe can be compared.” After comparing growth rates with Russia, France, and all of Europe combined, Pouisson boldly asserted: “North America presents, in the progress of its population, a spectacle without parallel in the history of the world.”<sup>67</sup>

Population growth was such an important process because it could be quantified, compared, and projected into the future. European observers meticulously documented a whole range of demographic statistics and consistently emphasized the unprecedented rate at which the United States’ population was growing. The terms “rapid” or “rapidity” were used over and over again in these accounts. The speed and dynamism of American growth were crucial elements in European discussions of American “progress.” While the expansion of transportation networks and population growth were impacting nations around the world, during the 1850s European observers first began to call attention to the fact that the United States was being transformed more rapidly, and more fundamentally, than others. They also glimpsed the roots of a new type of economy, as steam-powered machines moved beyond the textile-mills of the northeast to a wide variety of production sites across the nation.

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<sup>65</sup> Ibid., 366.

<sup>66</sup> Pouisson, *The United States*, 417.

<sup>67</sup> Ibid., 428.

### Extraordinary Progress in Industrial Pursuits<sup>68</sup>

“Like most visitors of Massachusetts,” William Chambers told his readers, “I made an excursion to Lowell.”<sup>69</sup> The textile factories of Lowell had been a must stop on the itinerary of all serious European travelers since the 1830s. Historians, too, have paid a great deal of attention to Lowell—and the textile industry it represented—in accounts of American industrialization. Indeed, the clothing industry forms the core of most histories of industrialization in the nineteenth century. Yet Chambers found little exciting in the famous New England textile town. While he did point out the relatively small amount of money it took to form a joint-stock company in the United States compared to Great Britain—the organizations that financed the works—he blithely remarked that “cotton-spinning and weaving factories are pretty much the same the world over.”<sup>70</sup>

What really roused Chambers’s interest was the mystery of the American newspaper. Being a successful publisher back in Edinburgh, Chambers was desperately curious as to how so many newspapers were produced at such a low cost. “Newspapers are seen everywhere,” Chambers exclaimed.<sup>71</sup> “In nothing, perhaps, is there such a contrast between Great Britain and America, as in the facilities for disseminating newspaper. In the former country,” he explained, “newspapers can hardly be said to reach the hands of rural labourers,” while in the United States “almost every man had a paper.”<sup>72</sup> Determined to discover the secret, he made an appointment to visit *Harper’s Magazine* while in New York City in the fall of 1853. In touring the factory, Chambers found that “thirty-four flat-pressure steam-presses... were producing the finest kind of

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<sup>68</sup> Chambers, *Things As They Are*, 201.

<sup>69</sup> *Ibid.*, 220.

<sup>70</sup> Chambers, *Things As They Are*, 221.

<sup>71</sup> *Ibid.*, 203.

<sup>72</sup> *Ibid.*, 204-205.

work, such as is still effected only by hand-labour in England.” The “machinery employed was more novel” than any he had encountered. “The Circulation of *Harper’s Magazine* is stated to be upwards of 100,000 copies,” Chambers incredulously announced, “which no hand-labour could produce.”<sup>73</sup> While he disparaged *Harper’s* for pirating “articles, often without acknowledgment, from English periodicals”—a widespread practice until the United States recognized international copyright laws in the late-nineteenth century—he nevertheless found the secret to Harper’s widespread distribution in the mechanization of the printing business.<sup>74</sup>

Like Chambers, European travel writers meticulously documented the usage of machines wherever they could be found. From the backwoods sawmills of Ohio to the imposing grain elevators of the Chicago, from the rice-mills of Charleston to the woodworking factories of Cincinnati, Europeans tediously documented every novel machine they came across, whether it was designed to produce a newspaper or press a brick. Many were surprised by what they encountered. Chambers announced to his European audience “the extraordinary progress in industrial pursuits” he found across the Atlantic, while Baxter asserted, “there is no one feature of American commerce more interesting than the readiness with which machinery is introduced into all branches of industry.”<sup>75</sup>

At a time when machines were not widely used outside the textile factories of Europe, American workers and engineers pioneered the application of machinery to a wide array of production processes. These applications are hard to get at with the historical data most often used by economic historians to measure the extent of a nation’s industrialization, such as import and export statistics or tonnage of coal and iron production. International comparisons of yearly

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<sup>73</sup> Ibid., 207.

<sup>74</sup> Ibid., 178.

<sup>75</sup> Ibid., 201, and Baxter, *America and the Americans*, 109.

iron exports tell us little about how different nations were modernizing through the application of machinery to more and more diverse branches of industry. European travel writing offers a valuable window into these applications. These works represent a sort of “bottom-up” perspective of American industrialization by observers who were familiar with the latest technological developments in Great Britain and Europe, but who nonetheless pointed to the “astonishing development of manufactures” across the Atlantic. Because of the technological innovation these machines represented, the widespread mechanization of the American economy became a key element in European discussions of American “progress” in the 1850s.

While Chambers solved the mystery of the prolific American newspaper amidst the buzz of a New York factory, the secret of mass-produced furniture beckoned him to the Midwestern boomtown of Cincinnati. “The idea of a factory as large as a Lancashire cotton-mill for making chairs, tables, or bedsteads by machinery, would hardly present itself to his imagination,” Chambers exclaimed. “Yet it is on this factory-mill system that we find house-furniture produced in Cincinnati.” On the outskirts of the city, he found factories “where manufactories of various kinds are conducted upon a scale that went very far beyond my previous notions of what can be done by machinery.”<sup>76</sup> He toured a furniture factory housed in a “huge brick building, five stories in height.... in which 250 hands are employed in different departments. Many of these,” he continued, “are occupied merely in guiding and superintending machines moved by shafts and belts from a large steam-engine on the ground-floor.”<sup>77</sup> He found the number of chairs “produced almost goes beyond belief.”<sup>78</sup> Like Chambers, Lakier was also amazed at the furniture factories of Cincinnati. “With woodworking machines powered by steam engines instead of hands,”

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<sup>76</sup> Chambers, *Things As They Are*, 151.

<sup>77</sup> *Ibid.*, 152.

<sup>78</sup> *Ibid.*, 152.

Lakier explained, “the wood was cut, planed, and worked to give it the desired shape of component parts.” These parts were then “marked with numbers” and “fitted together quite without the need of any special skill, so that from these parts were assembled the chairs, beds, and in general the furniture” that decorated the homes of settlers further West in the 1850s.<sup>79</sup>

As Chambers described, this method of production challenged European “notions of what can be done by machinery.” Chambers’ comparison to the Lancashire cotton-mill is significant. To most Europeans, the textile factory was *the* familiar site in which machinery was used. Great Britain pioneered the application of steam-powered machinery to mass-produce textiles beginning in the 1780s, but by the 1850s mechanization had barely spread beyond the clothing industry. Even in this industry, machinery was primarily used to spin and weave cloth, which was a fundamentally different process than mass-producing thousands of individual pieces then fitting them together to form a whole. As Chambers and Lakier described, workers were “occupied merely in guiding and superintending machines” and “assembling” the mass-produced component parts into a completed product. This production system, which was spreading to more and more industries in the United States during the 1850s, was largely unknown in Europe. This is a key reason why Europeans were so consistently shocked by the prolific use of machinery to expedite the production of a wide variety of items, from locks, clocks, and firearms, to boots, ploughs, and furniture. As with the transportation infrastructure and the demographic and geographic expansion of the United States, the widespread use of machines was a key element that placed the United States at the forefront of larger changes that were transforming the world of the mid-nineteenth century.

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<sup>79</sup> Lakier, *A Russian Looks at America*, 150.

Travelers were quick to notice the application of machines in spaces outside the traditional factory environment. In observing the dockyards of New York City, the Royal Navy Captain Lauchlan Mackinnon described the highly mechanized process of loading wheat to a sailing vessel bound for Europe. “To accelerate the introduction of the cargo,” Mackinnon explained, “a grain-elevator was employed. This novel machine pumped the grain from barges...in a continuous stream into the ship’s hold at the rate of two thousand bushels per hour. It was not only passed into the vessel at this prodigious rate,” he continued, “but was likewise accurately measured in the operation.”<sup>80</sup> Lakier marveled at similar operations in Chicago, where grain silos “are even more colossal” than what he had already seen in Buffalo and St. Louis. “There are simple, uncomplicated steam-drive machines,” Lakier explained, “to unload, weigh, and reload the grain... The resulting benefits are of immense proportions.”<sup>81</sup> Lakier stressed the labor-saving and thus cost-reducing effects of mechanization. “There is no need for thousands of stevedores or for sacks and wheelbarrows,” he reported, because “steam replaces all these contrivances and expensive muscle power.”<sup>82</sup>

Europeans also frequently documented small-scale applications of machinery. In Cincinnati, Chambers noticed a “portable flour-mill, occupying a cube of only four feet, and yet, by means of various adaptations, capable of grinding, with a power of three horses, from fourteen to sixteen bushels per hour.”<sup>83</sup> Across the Ohio River in Covington, Kentucky, Lakier visited “a sausage factory where the chopping-knife was operated by steam.”<sup>84</sup> Baxter noted a “cooking apparatus” which was “driven by steam power” in the hotels of the North.<sup>85</sup> He also

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<sup>80</sup> Mackinnon, *Atlantic an Transatlantic*, 39.

<sup>81</sup> Lakier, *A Russian Looks at America*, 180.

<sup>82</sup> *Ibid.*, 113.

<sup>83</sup> Chambers, *Things As They Are*, 154.

<sup>84</sup> Lakier, *A Russian Looks at America*, 160.

<sup>85</sup> Baxter, *America and the Americans*, 109.



documented “machines for the manufacture of ploughs, which turn out thirty in twelve hours.”<sup>86</sup> Arthur Cunynghame, a British lieutenant colonel stationed in southern Canada who traveled through Wisconsin on a hunting trip in 1851, documented a steam-powered machine for “peeling and quartering apples,” as well as an invention for milking cows “through the means of Indian rubber tubes.”<sup>87</sup> Pouisson described how bridges were constructed “by means of a movable steam machine” that converted trees into piles which were then, with the help of another machine, “driven into the earth at regular intervals.”<sup>88</sup> Along with the printing machinery of *Harper’s* factory, Chambers also noticed in New York City a machine for drying clothing at the famous Astor House hotel. “The drying is done by rapidly-whirling machines,” Chambers explained, “which wring out the wet, and cause the articles to pass through currents of hot air.”<sup>89</sup>

While European travelers noted individual examples of mechanical curiosities, like Lakier’s steam-powered sausage-chopping knife, they placed the most emphasis not on any individual machine, but rather on the widespread use of machines in general. In a typical statement describing American’s adoption of machinery, Pouisson argued, “They have applied steam more extensively, in every branch of industry, than any nation in the world.”<sup>90</sup> Lakier reported, “steam has been introduced on a large scale in place of manual labor for seemingly the most insignificant task.”<sup>91</sup> Phillippo listed a host of products manufactured by machinery, including firearms, glass and wooden wares, clocks, ploughs, boxes, household furniture, seamless bags, and bricks, before asserting that “The application of machinery to the development of the vast resources of the United States is unprecedented and almost universal.”<sup>92</sup>

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<sup>86</sup> Ibid., 109.

<sup>87</sup> Arthur Cunynghame, *A Glimpse at the Great Western Republic*, (London: Richard Bentley, 1851), 63.

<sup>88</sup> Pouisson, *The United States*, 374.

<sup>89</sup> Chambers, *Things As They Are*, 190.

<sup>90</sup> Pouisson, *The United States*, 484.

<sup>91</sup> Lakier, *A Russian Looks at America*, 179.

<sup>92</sup> Phillippo, *The United States and Cuba*, 86.

Mackinnon documented machines for door-making, stone-dressing, sewing, net-making, and even producing “biscuits for exports,” before he declared that “there is no one feature in American commerce more interesting than the readiness with which machinery is introduced into all branches of industry.”<sup>93</sup>

These descriptions clash with the traditional narrative of American industrialization, which does not highlight the widespread use of machines in the American economy until the late-nineteenth century. According to this story, machinery was confined to a small set of isolated industries from the 1850s through the 1890s. Mass production was pursued in the federal armories during the 1840s and 1850s, before slowly spreading to the typewriter industry in the 1870s and the bicycle industry in the 1880s. According to this chronology, mass production was only truly achieved with the advent of Ford’s assembly line in the early-twentieth century.<sup>94</sup> Yet over and over again in the 1850s European observers used phrases like “more extensively,” “almost universal,” and “in all branches” to emphasize the widespread application of machinery they found in the United States. These phrases challenge the prevailing historical description that confines the use of machinery to a small set of isolated industries.

While accounts of the ubiquity of machines in the American economy don’t necessarily prove that the United States was more technologically advanced than Europe, they do illustrate that beginning in the 1850s many Europeans perceived that it was. Like population growth and the density of railroads, traveler after traveler emphasized the widespread mechanization of the nation’s economy. As all of them knew, mechanization began in the textile factories of Great Britain. Yet they repeatedly emphasized that what they found in the United States was

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<sup>93</sup> Mackinnon, *Atlantic and Transatlantic*, 109.

<sup>94</sup> For this chronology, see David A. Hounshell, *From the American System to Mass Production 1800-1932: The Development of Manufacturing Technology in the United States*, (Baltimore: The Johns Hopkins University Press, 1984).

fundamentally different. This recognition marks a sea change in how Europeans perceived the United States. The pervasive use of machines represented a new stage in the Industrial Revolution and a new type of economy. As Chambers candidly explained, what he found in American factories challenged his “previous notions of what could be done by machinery.”<sup>95</sup> Through these accounts, what Pouisson called “the astonishing development of manufactures in the United States” became a key ingredient in larger depictions of American “progress.”<sup>96</sup>

### The Beginning of a New Era<sup>97</sup>

These three elements—infrastructure, population, and mechanization—formed the backbone of European depictions of the United States during the 1850s. This is not to say that other, more culturally and politically-focused topics were not pursued. Like Tocqueville and other travelers of the early-nineteenth century, European observers of the 1850s studied American prisons, investigated the compulsory education systems of the Northeast, and carefully considered the implications of Southern slavery in dividing the union. Yet these same observers consistently highlighted that beneath these cultural and political developments, the economy of the United States was transforming in profound and significant ways. Under the umbrella term “progress,” travel writers sought to capture the dynamism and novelty of what they found across the Atlantic. They documented rail mileage, steamship tonnage, demographic changes, economic statistics, and the use of machinery in order to encapsulate the growth and energy of the American economy. “In every direction, as we have shown,” Phillippo remarked, “unmistakable evidences appear of rapid progress and improvement.”<sup>98</sup> Captain Mackinnon explained “An

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<sup>95</sup> Chambers, *Things As They Are*, 151.

<sup>96</sup> Pouisson, *The United States*, 469.

<sup>97</sup> Baxter, *America and the Americans*, 70.

<sup>98</sup> Phillippo, *The United States and Cuba*, 366.

unprejudiced mind cannot avoid being struck with amazement at the progress of the United States. Whichever way the eye is cast,” he continued, “it is met with unmistakable signs of rapid progress and improvement.”<sup>99</sup>

In his Introduction, Mackinnon cautioned his readers that “the improvement is so general and rapid, both in people and country, that a very short time may render these pages an unfaithful index of the giant Republic.”<sup>100</sup> This description captures a central aspect of European discussions of the United States. Rather than highlighting one particular element, Mackinnon emphasized that American growth is “so general and rapid” as to nearly defy quantification. In European definitions of American progress, it was not simply the growth of one category or another that held significance. It was their combination. In this sense, the whole was more than the sum of the parts. The speed and the widespread nature of these changes, represented by the most modern technological innovations like gleaming locomotive engines, colossal river steamers, and gigantic grain elevators, consistently shocked European observers. As Baxter put it after traveling more than four months, “The rise and progress of the United States appears to me the greatest and most important political fact of this century, the beginning of a new era.”<sup>101</sup>

A crucial element of this new era was the rapidly increasing global connections spurred on by railroads and the telegraph. By the mid-1850s, for the first time in history the Atlantic and Pacific Oceans were linked by a transcontinental railroad through Panama. Telegraph wire crisscrossed North America and Europe and the first transatlantic cable was successfully laid in 1858. Global trade boomed and immigration peaked as travel costs were slashed.<sup>102</sup> Railroads

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<sup>99</sup> Mackinnon, *Atlantic and Transatlantic*, 38.

<sup>100</sup> *Ibid.*, vii.

<sup>101</sup> Baxter, *America and the Americans*, 70.

<sup>102</sup> For globalization in the nineteenth century, see Kevin H. O’Rourke and Jeffrey G. Williamson, *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, (Cambridge: The MIT Press, 1999).

spread to Peru, South Africa, and India. Textile factories hummed in Mexico. But equally as important as these physical changes was the fact that contemporaries began to perceive these transformations and grapple with their implications. Pouisson was particularly articulate in weighing these developments. “Communication has become so rapid,” he exclaimed, “that time has augmented in value a hundredfold; and distance so diminished, comparatively, that one may almost say that steam has annihilated space.”<sup>103</sup> According to Pouisson, there was much more at stake than simply the speed of travel or communication. “Nations can no longer remain strangers to one another,” he explained.<sup>104</sup> “Everything, therefore, tends to impel the people of earth in one direction and the epoch of national isolation is passed, never to return.”<sup>105</sup>

According to Pouisson, change was not only accelerating, it was defying national borders and knitting the world together. What began as a set of British innovations was evolving into a full-blown global revolution in transportation and production methods. Change had become the norm. In the context of rapid global integration, the “progress” of the United States took on new meaning. It was becoming more and more apparent that changes across the Atlantic would inevitably come back to Europe. Warnings beckoning Europeans to pay attention pervaded travel narratives of the period. “It would be unwise,” Baxter cautioned, “not to watch the gigantic industrial strides making by our neighbors.” In a stunning admission, Baxter wrote, “Their inventive capacity... and the unwearied activity displayed in every branch of material development, force themselves upon the notice of every civilized country, especially that which has hitherto been the workshop of the world.”<sup>106</sup> Captain Mackinnon sounded an even more explicit alarm. “Brother Jonathan is rapidly going ahead,” he boldly announced, “and leaving

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<sup>103</sup> Pouisson, *The United States*, 346.

<sup>104</sup> *Ibid.*, xix.

<sup>105</sup> *Ibid.*, xx.

<sup>106</sup> Baxter, *America and the Americans*, 108.

England behind.”<sup>107</sup> Watkin agreed, telling his fellow Brits that the United States “has far outstripped us in the rate of its progress.”<sup>108</sup>

These statements mark a major shift in tone from earlier travel accounts of the United States. Historians typically point to the early twentieth century as the first moment in which Europeans began to fear the “Americanization of the World,” as the British journalist William Stead famously put it in 1902.<sup>109</sup> Yet these accounts foreshadow Stead by nearly half a century. Already by the mid-1850s, economic growth across the Atlantic had become more than merely an intellectual curiosity. In a rapidly integrating world, analysis of the United States was crucial to understanding the nature of technological change and maintaining Europe’s position of global power. While Karl Marx and Friedrich Engels did not travel to the United States during this period, they did watch it carefully.<sup>110</sup> “The centre of gravity of world commerce” was shifting, they announced in an article published in the *Review* in 1850. “The role of London and Liverpool,” they warned, “is now being assumed by New York and San Francisco.”<sup>111</sup>

Like Marx and Engels, many European observers highlighted the burgeoning place of the United States in global trade. “At present,” Pouisson explained, “the vessels of the United States are encountered in every sea and in every port.”<sup>112</sup> Baxter reported “their clippers have a well-earned reputation in the China Seas, and their enterprising supercargoes may be found in every

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<sup>107</sup> Mackinnon, *Atlantic and Transatlantic*, vi.

<sup>108</sup> Watkin, *A Trip to the United States*, xii.

<sup>109</sup> William T. Stead, *The Americanization of the World; or, The Trend of the Twentieth Century*, (New York: H. Marckley, 1901). See, for example, Kristin Hoganson, *Consumer’s Imperium: The Global Production of American Domesticity, 1865-1920*, (Chapel Hill: The University of North Carolina Press, 2007), Mary Nolan, *Visions of Modernity: American Business and the Modernization of Germany*, (New York: Oxford University Press, 1994), and Robert W. Rydell and Rob Kroes, *Buffalo Bill in Bologna: The Americanization of the World, 1869-1922*, (Chicago: University of Chicago Press, 2005).

<sup>110</sup> Marx would not travel to the United States in his lifetime. Engels toured the United States in 1888 with Edward Aveling and Eleanor Marx-Aveling, Marx’s daughter.

<sup>111</sup> Karl Marx, Friedrich Engels, and Nelly Rumyantseva, *Marx and Engels on the United States*, (Moscow: Progress, 1979), 50.

<sup>112</sup> Pouisson, *The United States*, 486.

corner of the globe.”<sup>113</sup> After providing statistics documenting the increase in imports and exports between 1830 and 1850, Mackinnon admitted, “The mind is lost in astonishment at so prodigious a commerce.”<sup>114</sup> Following a visit to New York harbor, Lakier argued that “it is here that real American enterprise shone through. Ships of various sizes, countries, and nations were going in all directions.”<sup>115</sup> “To maintain their markets is the aim of Americans,” Lakier further explained, “and they will achieve it. Although all the sea-trading nations of the world do business with New York, most of the shipping is done by the Americans themselves.”<sup>116</sup> Phillippo went further, citing the total tonnage of global trade in a single year. According to his numbers, while Great Britain carried 5,043,270 tons, the United States came in a close second with 4,724,902 tons. “Even France, which comes next in the scale, is insignificant,” Phillippo asserted, “being but 716,000 tons.” Indeed, the American merchant marine grew to its apex during the 1850s. Although Phillippo’s numbers were slightly inflated, historians generally agree that the United States total peak tonnage was around 3.7 million, only a half-ton smaller than Great Britain and far larger than all other European nations.<sup>117</sup> In an article in *Blackwood’s Edinburgh Magazine* entitled “The Recent Growth of the United States of America,” the authors cited dozens of statistics to illustrate the “remarkable increase of trade” and “amazing developments of its commerce and production.”<sup>118</sup> The authors concluded, “The progress of the

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<sup>113</sup> Baxter, *America and the Americans*, 112.

<sup>114</sup> Mackinnon, *Atlantic and Transatlantic*, 98.

<sup>115</sup> Lakier, *A Russian Looks at America*, 63.

<sup>116</sup> *Ibid.*, 81.

<sup>117</sup> William Woodruff, *America’s Impact on the World: A Study of the Role of the United States in the World Economy, 1750-1970*, (London: The Macmillan Press Limited, 1975), 137.

<sup>118</sup> “The Recent Growth of the United States of America,” *Blackwood’s Edinburgh Magazine*, vol. 75, 705, accessed March 17, 2016,

[https://books.google.com/books?id=TXI6AQAAMAAJ&pg=PA705&lpg=PA7057q=%22the+recent+growth+of+the+United+States%22+1854&source=bl&ots=F3zMguBf3&sigSuEFYa3utXzDk\\_JNRCYGUVU5w8&hl=en&sa=X&ved=0ahUKEwjem5Rz8rJAhWEGR4KHxeoAvMQ6AEIHZAB#v=onepage&q=%22the%20recent%20growth%20of%20the%20United%20States%22%201854&f=false](https://books.google.com/books?id=TXI6AQAAMAAJ&pg=PA705&lpg=PA7057q=%22the+recent+growth+of+the+United+States%22+1854&source=bl&ots=F3zMguBf3&sigSuEFYa3utXzDk_JNRCYGUVU5w8&hl=en&sa=X&ved=0ahUKEwjem5Rz8rJAhWEGR4KHxeoAvMQ6AEIHZAB#v=onepage&q=%22the%20recent%20growth%20of%20the%20United%20States%22%201854&f=false).

entire people of the American republic will continue.”<sup>119</sup> To contemporary observers, American economic growth at home and the extension of American commerce abroad were integrally connected. Under the rubric of “progress,” Europeans worked to reconceptualize the place of the United States in the wider world.

Observers not only documented the quantitative growth of American trade, they also noticed a significant shift in the type of American products sent abroad. While in the early-nineteenth century American exports were overwhelmingly agricultural products like grain, rice, and cotton, this began to change by the 1850s. Already in 1845, Engels wrote in *The Condition of the English Working Class*, “America has in less than ten years created a manufacture which already competes with England in the coarser cotton goods, has excluded the English from the markets of North and South America, and holds its own in China, side by side with England.”<sup>120</sup> In visiting Philadelphia, Pouisson learned that “Locomotives from the factory of Mr. William Morris, of Philadelphia, are used on the Birmingham and Gloucester Railway in England, and on that of Berlin and Frankfort in Prussia.”<sup>121</sup>

Like the origins of the term “Americanization,” historians are used to tracing the growth of manufactured exports to the turn of the twentieth century. European observers, though, noticed them much sooner. “But yesterday the American nation was a people of consumers,” Pouisson explained, yet “to-day it reveals its power and its just pretensions to lavish on the other nations of the world its immense natural wealth, and the marvelous products of its industry.”<sup>122</sup> Statements like these challenge the traditional depiction of the United States as a peripheral and

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<sup>119</sup> Ibid., 714.

<sup>120</sup> Marx, Engels, and Romyantseva, *Marx and Engels on the United States*, 42.

<sup>121</sup> Ibid., 387

<sup>122</sup> Pouisson, *The United States*, xxii.



“secondary player” in the global trade networks of the mid-nineteenth century.<sup>123</sup> Instead, they invite us to reconsider the place of the United States in the world of international trade. The American carrying trade was nearly equal to Great Britain and far surpassed all other nations in the 1850s. By the end of the decade the United States was exporting mass produced clocks, locks, and firearms to Europe. American locomotives were shipped around the world, and the United States was playing a key role in opening up global trade. By the end of the 1850s the United States secured its commercial hold on Hawaii, initiated trade with Japan, and linked the Atlantic and Pacific with the Panama railroad.<sup>124</sup> Rather than being isolated from a larger global trade network centered around a European, and especially British, hub region, the United States was by the 1850s an integral and even leading player in the tremendous expansion of trade and global integration that defined the mid-nineteenth century. Historians have been slow to recognize this. European observers were not.

### Laws of Nature

In European travel writing the term “progress” became loaded with meaning during the 1850s. In many ways, an analysis of American “progress” was about more than the United States. In a free-trade pamphlet published in 1852, the British political economist Sir Robert Torrens announced, “The progress of the United States has been so uninterrupted, so rapid, and so permanent, that to talk of its retardation appears like questioning the continuance of the laws of nature.”<sup>125</sup> By the mid-nineteenth century, many Europeans began to perceive the changes

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<sup>123</sup> “Secondary player” from Lawrence A. Peskin and Edmund P. Wherle, *America and the World: Culture, Commerce, and Conflict*, (Baltimore: The Johns Hopkins University Press, 2012), 106.

<sup>124</sup> For an overview of U.S. commercial expansion in the 1850s, see Chapter Five of George C. Herring, *From Colony to Superpower, U.S. Foreign Relations Since 1776*, (Oxford: Oxford University Press, 2008).

<sup>125</sup> Sir Robert Torrens, *Tracts on Finance and Trade*, (London: Chapman & Hall, 1852), accessed February 17, 2016, <https://books.google.com/books?iZBdAAAACAAJ&printsec=frontcover&dq=sir+robert+torrens+Tracts+on+Financ>

associated with “progress,” including the transportation revolution, demographic and geographic expansion, and the increasing mechanization of production, were not isolated or fleeting transitions but rather permanent and even accelerating processes of transformation. The “laws of nature” that animated these changes were not confined to Europe, but were rapidly spreading around the world while at the same time bringing the world closer together. Yet the forces of progress were reshaping some regions faster than others.

Like William Baxter, many travelers to the United States were inspired to “think of the future.”<sup>126</sup> In the final page of his travel narrative, the Russian bureaucrat Aleksandre Lakier asked a powerful question: “But must Americans be confined to America or are they fated to return to Europe?” After pondering what he had seen on his nine-month journey through the states, he answered affirmatively. “They will have an influence on Europe,” he predicted, “but they will use neither arms nor sword nor fire, nor death and destruction. They will spread their influence by the strength of their inventions, their trade, and their industry. And this influence,” he argued, “will be more durable than any conquest.”<sup>127</sup>

Indeed, by the time Lakier concluded his travels the first major wave of American inventions had already washed ashore in Europe. The Great Exhibition of 1851 was meant to showcase the inventive genius and imperial might of the British Empire. The space granted to the United States was initially derided as “the American prairie land” because of its relative sparseness compared to other national sections, but by the time the doors closed on the Crystal Palace many Europeans had changed their tune. While many American exhibitors won gold

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<sup>126</sup> Baxter, *America and the Americans*, 17.

<sup>127</sup> Lakier, *A Russian Looks at America*, 261-262.

medals, one man in particular stole the show. Samuel Colt built upon his success in Hyde Park to become the first American multinational businessman to open a factory in Great Britain for the production of his celebrated firearms. In the process, he would ignite a whole new set of conversations about the rising power of the United States in the world.

## Chapter Two: The Flow of American Machinery Across the Atlantic

In January 1852, the *North American Review* published a review of two travel narratives. In it, the author observed a fundamental shift of European opinions of the United States. “Those who first wrote about the United States saw only the graceless aspect of our Republic,” the article began, pointing to Mrs. Trollope’s *The Domestic Manners of the United States*, first published in 1832. “It has another side,” the author continued, “which is rapidly coming into notice.”<sup>1</sup> One event, in particular, compelled this shift. “The Great Exhibition has done more than anything else to illustrate to Europeans the mission of the Anglo-American,” the author proudly announced. While Europeans “taxed all their skill to fashion brilliant gewgaws, such as might minister to the pride of nobles and potentates,” Americans “brought an array of machinery, designed to mitigate the toil of the common laborer.”<sup>2</sup>

The Great Exhibition, or the London Exhibition of the Works of Industry of all Nations, as it was officially known, did indeed transform European, and especially British, perceptions of American technological development. The mid-nineteenth century was a key moment of transition in the evolution of machinery as mechanization first began to move beyond the textile-industry and spread to an array of other products. By the time of the Great Exhibition, Americans were mass producing locks, clocks, firearms, and furniture. In British newspapers, Parliamentary hearings, and engineering institutes, Britons considered the importance and implications of the newly discovered “system” of production presented by Americans at the Crystal Palace. While the British press announced the United States “was bursting into greatness,” prominent British engineers like John Anderson and Joseph Whitworth crossed the

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<sup>1</sup> “Travels in America.” *The North American Review*. Vol. 74, No. 154, Article IX (Jan., 1852): 197-216, 197.

<sup>2</sup> *Ibid.*, 199-200.

Atlantic to study American factories and mass-production methods.<sup>3</sup> At the same time, American mechanics and businessman like Samuel Colt and Alfred Hobbs poured into Great Britain to set up shop. The Crystal Palace ignited a flurry of transatlantic discussions and travel as British engineers, editors, and government agents grappled with the meaning of the new American challenge in their midst.

The technological transfers and transatlantic discussions sparked by the Crystal Palace tell us a great deal about the rapidly globalizing world of the mid-nineteenth century and the changing relationship between the United States and Great Britain. On the one hand, they demonstrate the technological superiority of the United States by the 1850s in relation to Great Britain and the roots of what in the early twentieth century would be called the “Americanization of the world.”<sup>4</sup> But they also point to the growing and increasingly interconnected relationship between the two nations. Through the events surrounding the Crystal Palace, Britons changed the way they talked about the United States and embraced a world of friendly if still sensitive competition, a shift which represents important cultural underpinnings of the political “special relationship” that would develop later in the century.

### Mortifying but Useful Defeats

The London Exhibition of the Works of Industry of all Nations opened on May 1<sup>st</sup>, 1851, in Hyde Park. The building that housed the exhibition was specially constructed for the event and enclosed nearly 19 acres.<sup>5</sup> It was quickly nicknamed the Crystal Palace because of its novel glass

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<sup>3</sup> *The Liverpool Journal*, quoted in Henry Howe, *Adventures and Achievements of Americans; A Series of Narratives Illustrating Their Heroism, Self-Reliance, Genius and Enterprise*, (New York: E. Morgan & Sons, 1861), 619.

<sup>4</sup> W. T. Stead, *The Americanization of the World; The Trends of the Twentieth Century*, (New York: Horace Markley, 1901).

<sup>5</sup> *The Crystal Palace Exhibition Illustrated Catalogue, London 1851*, (New York: Dover Publications, Inc., 1970), xxi.

façade. Representatives from 27 countries attended the exhibition, which lasted from May through October. An unprecedented six million visitors made their way down the long halls and sometimes overwhelming displays.<sup>6</sup> His Royal Highness Prince Albert was an indefatigable advocate of the exhibition and made the ultimate decision to make it an international event, in contrast to other exhibitions of the early-nineteenth century, which had been local or national in scope. During a banquet to raise money for the exhibition in March of 1851, he noted the rapidly interconnecting world in which he found it necessary to expand the geographic scope of national exhibitions. “Nobody... who has paid any attention to the peculiar features of our present era will doubt for a moment that we are living at a period of most wonderful transition,” Albert proclaimed. “The distances which separated the different nations and parts of the globe are rapidly vanishing before the achievements of modern invention,” he continued, “and we can traverse them with incredible ease.”<sup>7</sup> Henry Cole, a key backer of the project, also highlighted the forces of attraction that were strengthened by commerce and technology in his *Introduction to the Official Catalogue*. “The activity of the present day chiefly develops itself in commercial industry,” Cole explained, “and it is in accordance with the spirit of the age that the nations of the world have now collected together their choicest productions.”<sup>8</sup>

In the shrinking world of the mid-nineteenth century, Great Britain’s growing global power was difficult to miss. The British Empire expanded phenomenally following the Napoleonic Wars. While consolidating their dominions in India, Africa, Australia, and North America, the British also used the largest navy in the world to expand global trade routes,

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<sup>6</sup> Paul Young, *Globalization and the Great Exhibition: the Victorian New World Order* (Basingstoke: Palgrave Macmillan, 2009).

<sup>7</sup> “The Great Exhibition of the Industry of all Nations, 1851,” Kenneth Spencer Research Library, The University of Kansas, accessed March 22, 2017, <http://liblamp.vml.ku.edu/spencer/exhibits/greatexhibition/index.htm>.

<sup>8</sup> Jeffrey A. Auerbach, *The Great Exhibition of 1851: A Nation on Display* (New Haven: Yale University Press, 1999), 97.

enforce the Monroe Doctrine in Latin America, and press China into unequal trade agreements during the Opium Wars. On the domestic front, the British pioneered an industrial revolution based on the mass-production of textiles using increasingly complex machines and the expansion of steam power.

In many ways, the Crystal Palace marked the apex of British confidence in its rightful place at the center of the world. As the *Illustrated London News* bragged two weeks after the opening of the Exhibition, London was not just “the capital of a great nation, but the metropolis of the world.”<sup>9</sup> Of the exposition’s nearly fourteen-thousand exhibits, Great Britain and her many colonies supplied nearly half. In a speech to the House of Commons made just a few weeks after its opening, Benjamin Disraeli called the Crystal Palace an “enchanted pile” created “for the glory of England and the delight and instruction of two Hemispheres.”<sup>10</sup>

Clearly, the British expected to educate the rest of the world. Yet to many Britons’ surprise, the United States would impart some useful instruction upon Great Britain. While the British press initially derided the American department, by the close of the exhibition a sea change in tone would occur. In turn, the growing recognition of American technological superiority ignited a series of transatlantic voyages that reshaped discourses of industrialization and reversed the flow of technological innovation across the Atlantic.

This eventual praise and recognition did not seem likely during the Exhibition’s opening days. Benjamin Johnson, official agent of the state of New York to the Exhibition, lamented in his report to the governor of New York, “In the early part of the Exhibition, the U.S. Department

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<sup>9</sup> Young, *Globalization*, 22.

<sup>10</sup>“Financial Policy; Speech of Mr. Disraeli on the Financial Policy of the Government Made in the House of Commons, June 30, 1851,” (London: Thomas Lewis, 1851), 15, accessed March 1, 2017, [https://books.google.com/books?id=6LtVAAAACAAJ&pg=PA15&lpg=PA15&dq=benjamin+disraeli+that+enchanted+pile&source=bl&ots=jihSRkDd2B&sig=n3AYuhvRNWkAei5I\\_aJ6nRTOMO4&hl=en&sa=X&ved=0ahUKEwjPnfKKzMzQAhUEfiYKHdBnA1wQ6AEIJTAC#v=onepage&q=benjamin%20disraeli%20that%20enchanted%20pile&f=false](https://books.google.com/books?id=6LtVAAAACAAJ&pg=PA15&lpg=PA15&dq=benjamin+disraeli+that+enchanted+pile&source=bl&ots=jihSRkDd2B&sig=n3AYuhvRNWkAei5I_aJ6nRTOMO4&hl=en&sa=X&ved=0ahUKEwjPnfKKzMzQAhUEfiYKHdBnA1wQ6AEIJTAC#v=onepage&q=benjamin%20disraeli%20that%20enchanted%20pile&f=false).

was the subject of much invidious remark, and our contributions were considered far behind the times.”<sup>11</sup> Indeed, Europeans wasted no time lampooning American contributions. A French observer, Julius Janin, wrote sarcastically the day before the official opening of the Exhibition, “The most complete branch of the Exhibition at the present moment is the American; it is complete; it is largely and solidly established. Order reigns in the American exhibition,” Janin teased, “but it is open to one objection—namely, the want of objects on display.”<sup>12</sup> A week and a half later the *London Morning Chronicle* agreed, reporting “a great deal of space unoccupied” in the American section of the Exhibition, “seemingly as if the goods were spread out to cover as much space as possible, rather than to present the most pleasing appearance.”<sup>13</sup> Perhaps the harshest description of the early American exhibits came from the satirical magazine *Punch*, which described “the glaring contrast between large pretension and little performance” exemplified in the “dreary and empty” space allotted to America. The authors were astonished to find America’s only “contribution to the world’s industry consists as yet of a few wine-glasses, a square or two of soap, and a pair of salt-cellars!”<sup>14</sup> Two weeks into the Exhibition, *The Times* caustically announced, “The American department is the prairie-ground of the exhibition; and our cousins, smart as they are, have failed to fill it.” The “prairie-ground” nickname stuck as it neatly encapsulated British superiority over a young and underdeveloped American nation.

“They cannot yet keep pace with the great strides of the European industries,” *The Times*

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<sup>11</sup> Benj. P. Johnson, *Report of Benj. P. Johnson, Agent of the State of New York, Appointed to Attend the Exhibition of the Industry of All Nations, Held in London, 1851* (Albany: C. Van Benthuysen, 1852), accessed June 5, 2017, [https://archive.org/stream/reportofbenjpjoh00john/reportofbenjpjoh00john\\_djvu.txt](https://archive.org/stream/reportofbenjpjoh00john/reportofbenjpjoh00john_djvu.txt).

<sup>12</sup> “The Industry of Nations, As Exemplified in the Great Exhibition of 1851. The Materials of Industry,” (London: Samuel Bentley and Co., 1852), 152, accessed June 2, 2017, <https://archive.org/stream/industryofnation00soci#page/n7/mode/2up>.

<sup>13</sup> “The World’s Fair,” *New York Daily Tribune*, May 16, 1851, 5, accessed March 2, 2017, <http://chroniclingamerica.loc.gov/lccn/sn83030213/1851-05-16/ed-1/seq-5/>.

<sup>14</sup> Robert F Dalzell, *American Participation in the Great Exhibition of 1851* (Amherst: Amherst College Press, 1960), 42.



continued. “Let them therefore await the future with patience and humility.”<sup>15</sup> The message was clear. The Crystal Palace was Great Britain’s moment to shine.

The American department was, in fact, relatively sparse compared to European sections of the Exhibition. D. Eldon Hall, an American observer hired by P.T. Barnum to observe and then lecture on the Exhibition, described some of the reasons for these shortcomings in a history of the Crystal Palace he published in 1852. “Many causes conspired to promote the scantiness of our offerings,” Hall explained to his fellow Americans. “In the first place, then, so many conflicting rumors” emanated from Great Britain that the American press was misled. Thus “the public were unable to obtain a fair idea of the proposed Industrial Exhibition.” Hall also highlighted the lack of government support and funding. “The matter was not taken up by our government in the way which enabled Austria, France, and other countries... to make a superior display.”<sup>16</sup> Indeed, besides supplying the *Lawrence*, a frigate to transport a portion of the American exhibits, the United States government had virtually no involvement in funding or assisting American exhibitors. Once the exhibits arrived, they barely made it off the hull of the *Lawrence*. The American banker and London resident George Peabody provided \$15,000 at the last minute to transport and arrange the American exhibits.<sup>17</sup> Hall also pointed out the fact that Americans incurred a much higher cost of transportation compared to nearby nations like Belgium or France. “Notwithstanding all these drawbacks,” he proudly declared, “many contributions were sent.”

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<sup>15</sup> Quoted in Howe, *Adventures and Achievements*, 601.

<sup>16</sup> D. Eldon Hall, *A Condensed History of the Origin, Rise, Progress and Completion of the “Great Exhibition of the Industry of all Nations,” Held in the Crystal Palace, London, During the Summer of the Year 1851* (New York: Clinton Hall, 1852), 41, accessed February 2, 2017, <https://books.google.com/books?id=eENdTB7UKCwC&pg=PA90&lpg=PA90&dq=D.+Eldon+Hall,+A+History+of+the+Great+Exhibition+of+Industry+of+All+Nation&source=bl&ots=QZb1pC7gw8&sig=Q7O91gJDr-sLfEWlrTJTg-3GjmE&hl=en&sa=X&ved=0ahUKEwjyw8WAI5rQAhVK0WMKHQJwAzkQ6AEIzAC#v=onepage&q&f=false>.

<sup>17</sup> Merle Curti, “America at the World Fairs, 1851-1893,” *The American Historical Review* 55, no. 4, (1950).

Hall went on to describe to his fellow Americans how they were received at the Exhibition, complaining “when the United States department was first opened to the public, the whole press of Great Britain joined...in one derisive cheer!”<sup>18</sup> The American agent of New York, Benjamin Johnson, concurred. He reported hearing insulting comments repeatedly during the first month of the Exhibition. After quickly glancing over the American department, British observers loudly disparaged the displays. Johnson reported hearing proud British visitors remark, “These may do for a new country, but would not answer in England.” Standing amongst his country’s exhibitions, which were sent across an ocean at great expense to be displayed, these insults were difficult to bear. “It was not a very pleasant position, to be met with remarks similar to these, day after day for several weeks,” Johnson admitted.

Although the negative reception Americans received would last through the first half of the Exhibition, a sharp reversal in opinion occurred following three highly publicized competitions between the end of July and the end of August. The first involved an American company’s victory during an agricultural competition in a soggy British wheat field. The second came after an American locksmith bested the notoriously impenetrable Bramah lock. And finally, the New York yacht the *America* triumphed over its British competitors at a widely publicized race held at the Isle of Wight. These three victories brought a renewed interest in the American exhibits and opened the door for further discussions about the nature of industrialization and mechanization and the peculiar path these processes were taking in the United States.

On July 24, 1851, the Jury on Agricultural Implements held a practical test of the various reapers submitted to the Exhibition at Mr. Mechi’s model farm at Tiptree Heath in Essex.

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<sup>18</sup> Hall, *A Condensed History*, 42.

Engineers and mechanics in the United States had been steadily improving on reaping machinery since the mid-1830s. By the time of the Exhibition, Cyrus McCormick's Virginia Reaper could accomplish the work of twenty men and was widely used in the expanding farmland of the West, but was relatively unknown in Europe. *The Times* initially derided McCormick's Reaper as "a cross between a flying machine, a wheelbarrow, and an Astley chariot," but it nevertheless performed admirably on Mr. Mechi's farm.<sup>19</sup> The Americans D. Heldon Hall and B. P. Johnson were present that rainy summer day to witness the competition, joining over two hundred other agriculturists, jurists, and interested bystanders. Even the Prince Consort attended the competition, a testament to the magnitude of the occasion: "Prince Albert, himself a farmer of no mean ability, was present," Hall noted incredulously, "and bets ran high on either side." Because of the rain and the fact that much of the grain was still green, the British reapers failed to operate. Yet McCormick's reaper surprised European observers when it functioned perfectly. According to Johnson, after the completion of the trial, Mr. Mechi, the owner of the property, jumped upon a tractor and called for "three hearty English cheers" to American innovation.<sup>20</sup>

After McCormick's success in the reaper competition, both Johnson and Hall observed a major shift in public attention. In a report published in the *Albany Evening Journal* just a few days after the competition, Johnson bragged, "You can hardly imagine how the tone is altered since we have had our implements tried." Turning the derisive nickname given by *The Times* back on his European hosts, Johnson crowed that "The 'Prairie Ground' is filled with inquirers."<sup>21</sup> Hall concurred and proudly announced of American reapers, "Nothing at all like

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<sup>19</sup> *The Times*, quoted in Charles T. Rodgers, *American Superiority at the World's Fair. Designed to Accompany a Chromo-Lithographic Picture, Illustrative of the Prizes awarded to American Citizens, at the Great Exhibition* (Philadelphia: John J. Hawkins, 1852), 15, accessed February 2, 2017, <https://archive.org/stream/americansuperior00rodg#page/n5/mode/2up>.

<sup>20</sup> Hall, *A Condensed History*, 45.

<sup>21</sup> B. P. Johnson, quoted in Rodgers, *American Superiority*, 15.

them had hitherto been seen in Europe, and the curiosity of agriculturists was wound up to the highest pitch.”<sup>22</sup> Before the year was out, McCormick signed a licensing agreement with the British firm Burgess & Key and began exporting large numbers of reapers to Great Britain.<sup>23</sup> McCormick became one of many American businesses to benefit from their exposure at the Crystal Palace.

The next two major victories for American exhibitors took place on the same day, August 23, 1851. First, the American lock maker Alfred C. Hobbs created a sensation when he finally succeeded in picking the celebrated British Bramah lock after nearly fifty-one hours spread over sixteen separate days between July 24 and August 23.<sup>24</sup> Reports of his success flooded British and American papers and marked the second blow to British superiority. While several eminent British lock pickers attempted to crack Hobbs’s lock, the Newell Parautoptic Lock, none succeeded. His lock was awarded the highest prize medal in its class, and the Jurors who awarded declared that “it had not been overrated by the Queen of Great Britain, Prince Albert, and the Duke of Wellington, when they exclaimed that ‘the great American lock has no rival for mechanical skill and the security it afforded.’”<sup>25</sup> Hobbs would stay on in England after his victory to found a successful lock making company based on the mass production of cheap locks using American machinery imported from the North.<sup>26</sup> Like McCormick, Hobbs capitalized on his success at the Crystal Palace and opened a lock-making factory in Great Britain in the early 1850s.

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<sup>22</sup> Hall, *A Condensed History*, 45

<sup>23</sup> Mira Wilkins, *The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914* (Cambridge: Harvard University Press, 1970).

<sup>24</sup> Described in Rodgers, *American Superiority*, 91.

<sup>25</sup> Jurors quoted in Rodgers, *American Superiority*, 91.

<sup>26</sup> Nathan Rosenberg, eds., *The American System of Manufactures: the report of the Committee on the Machinery of the United States 1855, and the special reports of George Wallis and Joseph Whitworth 1854* (Edinburgh: Edinburgh U.P., 1969).

While Hobbs's victory was significant—Bramah's famous lock had not been bested for nearly forty years—the success of the New York yacht the *America* was the most symbolic and widely publicized of the three major competitions. A great shipbuilding rivalry between Great Britain and the United States had existed since American Independence, but was heightened by the increasingly swift American clippers and the innovative designs of New York shipbuilders, whose crafts often held impromptu races to reach anchored ships just offshore and waiting to unload. On the morning of August 22, 1851, the New York yacht *America* joined the Royal Yacht Squadron's fifty-three-mile race around the Isle of Wight. According to the *London Times*, “A large portion of the peerage and gentry of the United Kingdom left their residences, to witness the struggle between the yachtsman of England, hitherto unmatched and unchallenged.”<sup>27</sup> As was customary for the event, Queen Victoria and Prince Albert were also present. While the *America* had a bad start due to a faulty anchor, by the end of the race she was nearly twenty minutes ahead of the nearest competitor. As the *London Times* reported, the excitement of the crowd climaxed as she rounded the cliff that marked the finish line and “all the steamers weighed and accompanied her, giving three cheers as she passed.”<sup>28</sup>

Shortly after the race, the *European Times* declared, “The success of the new yacht, the *America*, which has recently appeared at Cowes, has created a positive *furor* in England.”<sup>29</sup> Queen Elizabeth inspected the *America* the day after the competition and, according to the *London Times*, “expressed great admiration of the general arrangements, and character of this famous schooner.”<sup>30</sup> On September 2, *The Times* described the *America* as taking “a class to itself. Of all the victories ever won none has been so transcendent as that of the New York

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<sup>27</sup> Howe, *Adventures and Achievements*, 615.

<sup>28</sup> *Ibid.*, 619.

<sup>29</sup> Quoted in Rodgers, *American Superiority*, 82. Italics original.

<sup>30</sup> Howe, *Adventures and Achievements*, 619.

schooner. The account given of her performance suggests the inapproachable excellence attributed to Jupiter.”<sup>31</sup> Hall celebrated the *America*’s success as a “victory over England herself, more important than the Exhibition, and all its treasures ten times told!”<sup>32</sup>

The highly-publicized victories of McCormick, Hobbs, and the *America* between July and August of 1851 brought growing crowds to the American department of the Exhibition and decisively changed the tone of the European press. The American agent B.P. Johnson proudly chronicled this shift in his report to the New York Legislature. While at the beginning of the Exhibition, “the United States department was comparatively overlooked,” Johnson wrote, American victories “gave a new direction to public attention” as “more interest was manifested in our department.”<sup>33</sup> The British *Daily News* recorded this shift midway through the Exhibition when it announced, “A great change has taken place in the comparative attractiveness of the various departments. Formerly the crowds used to cluster most in the French and Austrian section,” it continued, “while the region of the stars and stripes was almost deserted—now the domain of Brother Jonathan is daily filled with crowds of visitors.”<sup>34</sup> Five days after the success of Hobbs and *the America*, the *Liverpool Times* admitted the Americans were “no longer to be ridiculed, much less despised.”<sup>35</sup>

As ridicule transformed into genuine curiosity and more and more visitors sought out the American department, a wide array of American exhibits gained notoriety. Gael Borden’s Meat Biscuits won a prize medal for their innovative preservation capacities, while Schooley and Hough’s Cincinnati Cured Hams were served at the royal table at Gore House during a

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<sup>31</sup> Quoted in Rodgers, *American Superiority*, 61.

<sup>32</sup> Hall, *A Condensed History*, 24.

<sup>33</sup> B.P. Johnson, quoted in Rodgers, *American Superiority*, 15-16.

<sup>34</sup> *Daily News*, quoted in *Ibid.*, 62.

<sup>35</sup> *Liverpool Times*, quoted in *Ibid.*, 89.

celebratory feast.<sup>36</sup> Goodyear's Indian Rubber Fabrics first made their appearance in Europe at the Exhibition, and the Gothic stained-glass windows that were shaped out of Taylor's transparent soap wowed curious European visitors to the American department.

*Punch* magazine provided the most colorful account of the shift in European opinion of the United States' in a poem fashioned to the melody of Yankee Doodle. The poem begins:

Yankee Doodle sent to town  
His goods for exhibition;  
Every body ran him down,  
And laughed at his position;  
They thought him all the world behind  
A goney, muff, or noodle.  
Laugh on, good people—never mind—  
Says quiet Yankee Doodle.

CHORUS—Yankee Doodle, etc.

In five more verses *Punch* pointed to the victories of McCormick, Hobbs, Colt, and the *America* before admitting that Great Britain had been “licked”:

And you must now be viewed all  
As having been completely licked  
By glorious Yankee Doodle

CHORUS—Yankee Doodle, etc.<sup>37</sup>

In addition to announcing a new appreciation for American innovations, the British press also articulated a growing awareness of the importance of competition and technological

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<sup>36</sup> Ibid., 24.

<sup>37</sup> *Punch*, quoted in Rodgers, *American Superiority*, 91.

exchange in the rapidly interconnecting world of the mid-nineteenth century.<sup>38</sup> Indeed, the Crystal Palace itself was a steel and glass embodiment of this new world. As the telegraph, railroads, and steamboats linked the globe in ever tighter networks of exchange, technological competition was beginning to be appreciated as not only normal but necessary to the long-term stability and strength of individual nation-states. The surprising achievements of American technology at the exhibition and the heightened awareness of competition in the context of a rapidly interconnecting world encouraged the British press to talk about the United States in new and important ways.

“The new world is bursting into greatness,” the *Liverpool Journal* announced, “walking past the old world, as the *America* did the yachts at Cowes.” The results of the Crystal Palace point to “the direction in which our inevitable competition should proceed,” it continued. While at once applauding the “greatness” of the United States, the journal also issued an ominous warning: “America, in her own phrase, is ‘going ahead,’ and will assuredly pass us unless we accelerate our speed; and if our competitors once pass us, we are lost.”<sup>39</sup> *The Times* took a less alarming tone, but still highlighted a growing awareness of technological competition. “We think on the whole, that we may afford to shake hands and exchange congratulations, after which we must learn as much from each other as we can,” the article counseled. It went on to predict the rapid adoption of American products in British markets. “As for yachts, we have no doubt that by next August every vessel of the Cowes squadron will be trimmed to the very image of the *America*; there is no doubt that our farmers will reap by machinery, and the revolver,” *The Times* admitted,

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<sup>38</sup> Jurgen Osterhammel and Niels P. Peterson. *Globalization: a Short History*, (Princeton: Princeton University Press, 2005). Kevin H. O’Rourke and Jeffrey G. Williamson, *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, (Cambridge: MIT Press, 1999). Charles Bright and Michael Geyer, “Where in the World is America? The History of the United States in the Global Age,” 63-100, in Thomas Bender, eds., *Rethinking American History in a Global Age*, (Berkeley: University of California Press, 2002).

<sup>39</sup> The *Liverpool Journal*, quoted in Howe, *Adventures and Achievements*, 619.



“is too attractive an embodiment of personal power to be overlooked by European mischief-makers.”<sup>40</sup> The *London Observer* highlighted the growing commercial competition Great Britain faced, noting, “Our cousins across the Atlantic cut many degrees closer to the ground than we do in seeking for markets.” After listing the major competitions of the season, the article admitted “our own children are now and then able to point out how we can improve.”<sup>41</sup> In an article looking back on the exhibition published in mid-October, *The Times* remembered “the mortifying but useful defeats which we have received from our children across the Atlantic.”<sup>42</sup> In articles like these, the British press at once bemoaned their defeats while at the same time encouraging their fellow Britons to engage and learn from American achievements. In doing so, they reflect a growing appreciation of the need to watch and learn from technological developments abroad.

While boldly embracing international competition, the British press also began to articulate a set of differences between the broader economic systems of the United States and Europe. Shortly after the close of the Crystal Palace, the *London Observer* reflected on these disparities. “With an immense command of raw produce, they do not, like many other countries, skip over the wants of the many, and rush to supply the luxuries of the few.... They produce for the masses, and for a wholesale consumption.” The *Observer* then emphasized that to accomplish these goals, Americans “have turned their attention eagerly and successfully to machinery.”<sup>43</sup> The *British Quarterly Review* announced that “In art and literature...America is yet behind England...But in... industrial invention, they have already an acknowledged

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<sup>40</sup> “The Great Exhibition,” *The Times*, October 13, 1851, quoted in Rogers, *American Superiority*, 135.

<sup>41</sup> The *London Observer*, quoted in *ibid.*, 127.

<sup>42</sup> “The Great Exhibition,” quoted in *ibid.*, 135.

<sup>43</sup> *London Observer*, quoted in Rodgers, *American Superiority*, 126.

superiority.”<sup>44</sup> The *Official Catalogue of the Exhibition* also noted American industry had developed “a character distinct from that of many other countries. The expenditure of months or years of labour upon a single article” just to increase its value “is not common in the United States. On the contrary,” the Catalogue explained, Americans used machines “with direct reference to increasing the number or the quantity of articles suited to the wants of the whole people.”<sup>45</sup>

These observations of the growing importance of mass production and the increasing use of machines in the United States came at an important turning point in the history of technology. While at the beginning of the nineteenth century the use of machinery across the industrialized world was largely confined to the textile industry, by the end of the century the mechanization of production had spread to an endless array of products, from sewing machines and bicycles to shoes and automobiles. The mid-nineteenth century was a turning point in this evolution as machines were applied to the production of increasingly varied goods.<sup>46</sup> The Crystal Palace brought this moment of transition to the fore and highlighted the fact that the British were falling behind American technological innovations.

The surprising achievements of American inventions and a new appreciation of mass production raised serious questions about the future of technological development and the relative strength of the American and British economies. Two days after the close of the Exhibition, *The Times* reflected on these questions. “The two great issues raised by late event which has just terminated may be briefly stated thus,” *The Times* began. “In what direction as an

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<sup>44</sup> *British Quarterly Review*, quoted in Howe, *Adventures and Achievements*, 621.

<sup>45</sup> *Official Catalogue of the Exhibition*, quoted in Rosenberg, *The American System*, 7.

<sup>46</sup> Eric Hobsbawm, *Industry and Empire: The Birth of the Industrial Revolution*, (New York: The New Press, 1968), especially Chapter 6. Robert C. Allen, *Global Economic History: A Very Short Introduction*, (Oxford: Oxford University Press, 2011), 83.

industrial community should we henceforth travel, and by what means should we proceed?" It then defined two potential paths, one focused on the "costly and the beautiful in production" and the other based on "unpretending and material influences" that focuses on the masses. In considering these different paths, Great Britain found itself "standing between the civilization of the New World and that of the Old." Influenced by the American exhibits at the Crystal Palace, *The Times* counseled Great Britain to lean towards the New. "The mortifying but useful defeats which we have received from our children across the Atlantic" and "the wide publicity given to new materials, machines, and processes" should "keep our manufactures utilitarian in their character."<sup>47</sup> As *The Times* pointed out, the Exhibition brought a heightened awareness of the industrial products of the United States, as well as the methods of mass production that were used to make them.

One product, in particular, came to represent this new manufacturing technology—Samuel Colt's revolver. Of all the American products on display at the Exhibition, Samuel Colt's revolver was arguably the one that received the greatest attention. According to the *London Times*, "The most popular and famous invention of American industry, is a pistol."<sup>48</sup> The *Daily News* reported that "the click of Mr. Colt's revolvers is unceasing."<sup>49</sup> The *Maidstone Gazette* argued that "if the Great Exhibition confers no other national benefit, that of having public attention called to this formidable arm, is one of no ordinary importance."<sup>50</sup> As Hall recalled in his history of the Exhibition, "Our revolving six-barreled-pistols excited the attention of the military authorities."<sup>51</sup> During the Exhibition, word got out, probably spread by Colt himself,

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<sup>47</sup> "The Great Exhibition," quoted in Rodgers, *American Superiority*, 135.

<sup>48</sup> The *London Times*, quoted in Howe, *Adventures and Achievements*, 66.

<sup>49</sup> The *Daily News*, quoted in *ibid.*, 62.

<sup>50</sup> The *Maidstone Gazette*, quoted in *ibid.*, 31.

<sup>51</sup> Hall, *A Condensed History*, 49.

that machinery was extensively used in the construction of his firearm. While this fact was probably little more than a minor curiosity to the average Exhibition visitor, it sent shock waves through the engineering community of Great Britain. Within a few weeks of the Exhibition's close, Colt was invited to address the prestigious Institute of Civil Engineers—the first American to do so—on the use of machinery in the production of his acclaimed firearm. Like Hobbs and McCormick, Colt would remain in Great Britain after the Exhibition closed to secure a European market for his firearms. He would go on to set up a factory on the banks of the Thames in the winter of 1852. This factory would become something of an exhibition itself, as the most accomplished British engineers of the period would study its machinery and help inspire the British government to build an armory based on American production methods.

#### On the Application of Machinery<sup>52</sup>

While many American inventors and businessmen capitalized on their victories and the exposure they gained during the Crystal Palace Exhibition, none captured the interest of the British like Samuel Colt. Part of this attention certainly came from the nature of the product Colt manufactured. By the mid-nineteenth century Europeans were two centuries into a gunpowder revolution that witnessed rapid improvements in all aspects of military technology, from naval cannons to the rifling of barrels.<sup>53</sup> In this context, Colt's revolving pistol was another improvement in a long line of technical innovation that would assuredly garner a great deal of attention from Europeans. By 1851, Colt's revolvers had already been extensively tested by U.S. military authorities and used against various Native Americans tribes in the Southeast and West

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<sup>52</sup> This is the title of a speech Colt delivered to the Institute of Civil Engineers, cited below.

<sup>53</sup> "Gunpowder revolution" from the seventh chapter of John Landers, *The Field and the Forge; Population, Production, and Power in the Pre-Industrial West*, (Oxford: Oxford University Press, 2005).

as well as during the Mexican-American War between 1846 and 1848. By the time of the Exhibition, Colt was busy securing further government contracts and planning a massive factory in Hartford, Connecticut.<sup>54</sup>

Long before the three major victories of McCormick, Hobbs, and the *America* of early August, the *London Times* reported, Colt's exhibit was a magnet to European crowds. On June 9, 1851, the widely-read paper described "a knot of enterprising travellers... gathered around a kind of military trophy which is affixed to the northern side of the nave. This grim display," the author continued, "consists of numerous pistols... and constitutes the most important contribution of our Transatlantic friends to the Exhibition of the Industry of all nations."<sup>55</sup> The *Maidstone Gazette* agreed and argued that "if the Great Exhibition confers no other national benefit, that of having public attention called to this formidable arm, is one of no ordinary importance." The paper had a special interest in the well-being of British cavalry as Maidstone, a town in Kent, was the chief cavalry depot of the British military. In the summer of 1851, the British were engaged in the eighth Kaffir war in South Africa and were experiencing heavy losses at the hands of Xhosa warriors. The paper recounted "the most humiliating circumstances in the recent war at the Cape, was that a horde of Kaffirs rushing on a small detachment of our troops, and wresting their muskets from their hands after the first discharge... had the Kaffirs been attacked by cavalry, armed with such weapons," the paper advised, "the enemy would by this time have been hunted out of the colony."<sup>56</sup> The elderly Duke of Wellington, who was not known for his openness to innovation, was frequently seen at the exhibit arguing for the

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<sup>54</sup> William Hosley, *Colt: The Making of an American Legend* (Amherst: The University of Massachusetts Press, 1996). Charles T. Haven and Frank A. Belden, *A History of the Colt Revolver and the Other Arms Made by Colt's Patent Fire Arms Manufacturing Company from 1836-1940*, (New York: Bonanza Books, 1940), 85-88.

<sup>55</sup> The *London Times*, quoted in Rodgers, *American Superiority*, 65.

<sup>56</sup> The *Maidstone Gazette*, quoted in Rodgers, *American Superiority*, 31.

importance of repeating firearms.<sup>57</sup> *Punch* magazine even printed an entire poem lauding the usefulness of Colt's firearm entitled "John Bull to Colonel Colt." A typical line emphasized the revolutionary ability of one gun to fire so many shots:

Rob my strong box,  
And seize my flocks,  
Herds, cocks, and hens, and pullets.  
I want your gun,  
Instead of one  
That fires so many bullets."<sup>58</sup>

While the British press sang his praises, Colt was asked by the prestigious Institute of Civil Engineers to give a presentation in November 1851. It is significant that Colt was the first American to speak at the Institute, a fact that marks a growing respect for American technological skill in the wake of the Exhibition.<sup>59</sup> But the topic he was asked to lecture upon was even more important. While Colt's revolving pistol impressed the British press in the summer of 1851, the firearm could easily be examined at the Exhibition grounds. It was not the pistol, but its method of construction, that most interested British engineers. Throughout the Exhibition, Colt proudly claimed that his firearm was produced almost entirely by machinery. Because in Great Britain guns were still made by hand, and because of the complicated shape and small size of a firearm's various pieces, the use of machinery in its construction was nothing sort of revolutionary to the British engineering community.<sup>60</sup>

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<sup>57</sup> Rosenberg, *The American System*, 15.

<sup>58</sup> *Punch*, quoted in Rodgers, *American Superiority*, 63.

<sup>59</sup> Rosenberg, *The American System*, 16.

<sup>60</sup> The state of British gun-making was discussed extensively by the British engineer John Anderson in "On the Application of Machinery in the War Department," *Journal of the Society of Arts* Vol. 5, No. 219, (Jan. 30, 1857), accessed March 2, 2017, [https://archive.org/stream/practicalme2218571858glas/practicalme2218571858glas\\_djvu.txt](https://archive.org/stream/practicalme2218571858glas/practicalme2218571858glas_djvu.txt).

Colt delivered his paper “On the application of Machinery to the Manufacture of Rotating Chambered-Breech Fire-Arms, and the peculiarities of those Arms” to the Institute on November 25, 1851, to an audience that included distinguished members of the British engineering profession, high British military leaders, and the President of the Institute, Sir William Cubitt. After recounting a brief history of his firearm, Colt moved on to describe the machinery he used in his factory at Hartford, Connecticut: “Machinery is now employed by the Author, to the extent of about eight-tenths of the whole cost of construction of these fire-arms... Thus he obtains uniformity as well as cheapness in the production of the various parts.”<sup>61</sup> Colt contrasted this method with those found in Europe. “The manufacture of arms, both in Great Britain and on the Continent is carried on almost entirely by manual labour,” Colt reminded his predominately British audience, “the various parts being forged and filed and ground into the requisite form, by workmen at their own houses.”<sup>62</sup>

After crowing about this difference in methods of construction, Colt moved on to describe the basics of how his factory operated. “Like all the other parts,” Colt explained, “the lock frame is forged by swages, and its shape completed by one blow.” He described a few more specific actions various machines performed on the lock frame before summarizing: “so that after passing through twenty-two distinct operations, the lock frame is ready for finishing by hand, which consists in merely removing the rough edge, or burr, left by the machinery, and giving it the last polish and hardening.” In a few more paragraphs, Colt described the basic actions machines performed on the rotating chambered cylinder, the barrel, and the stock, then moved to summarize how his factory was organized: “In fact, all the separate parts travel

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<sup>61</sup> Charles Manby, eds., *Colonel Samuel Colt: On the application of Machinery to the Manufacture of Rotating Chambered-Breech Fire-Arms, and the peculiarities of those Arms*, (London: William Clowes and Sons, 1855), 12, accessed January 25, 2017, <https://babel.hathitrust.org/cgi/pt?id=hvd.32044024282006;view=1up;seq=5>.

<sup>62</sup> *Ibid.*, 13.

independently through the manufactory, arriving at last, in an almost complete condition, in the hands of the finishing workmen, by whom they are assembled.”<sup>63</sup> In perhaps the most significant portion of the address, Colt defined the wider meaning of this system of production. “A large number of machines is necessarily required for these operations; as it has been found advantageous to confine each one to its peculiar province... By this system,” Colt concluded, “the machines become almost automatons... and thus the economy and precision of the manufacture are insured.”<sup>64</sup>

Following his address, Colt fielded questions and participants weighed in on the merits of Colt’s arms. Commodore Sir Thomas Hastings, like the *Maidstone Gazette* a few months earlier, argued for the introduction of Colt’s weapons to British troops fighting in South Africa. “For use against savage tribes,” Hastings argued, “it must be a most effective weapon. The tactics of the Kaffirs were to tease an outpost sentry, at a distance,” Hastings continued, “until they had drawn his fire... Now nothing could be more perfectly adapted to meet these tactics, than the revolvers.”<sup>65</sup> A British engineer, Mr. Hodge, who had travelled to the United States and visited Colt’s armory at Hartford, “was happy to have an opportunity of adding his testimony to the merits of Colonel Colt’s weapons, and to the simplicity and effectiveness of the machinery employed... The gunmakers of Birmingham,” Hodge counseled, “might certainly learn much from studying Colonel Colt’s system of manufacturing.”<sup>66</sup>

The following year Colt was awarded the prestigious Telford Medal and elected an Associate of the Institute, an honorary position that testifies to the respect Colt had earned from the British engineering community. He continued to build upon his success and made plans to

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<sup>63</sup> Ibid., 13.

<sup>64</sup> Ibid., 14.

<sup>65</sup> Ibid., 19.

<sup>66</sup> Ibid., 24.



open a factory in Great Britain to more easily secure large British government contracts. While he returned to the United States in February of 1852, he maintained correspondence with his recently hired British agent and successfully rented out space in an abandoned factory on the banks of the Thames later that year. Colt returned to Great Britain in October of 1852 with the machinery and workmen needed to get the factory off the ground, and it began production in the first week of 1853.<sup>67</sup> The establishment of this factory was a significant moment in the deepening networks of technological exchange of the 1850s. As well as making Colt's business America's first multinational business, the site would be visited by the most prominent British engineers of the period, several of whom would play an integral role in the mechanization of the British government's armories in the mid-1850s.<sup>68</sup>

The factory also drew the attention of the British press, and in May of 1854 none other than Charles Dickens described his tour of the factory in the weekly literary magazine *Household Words*. Like Colt in his speech to the Institute of Civil Engineers, Dickens described how the extensive use of machinery he found was different than British gun-making techniques. "Under the roof of this low, brick-built, barrack-looking building," Dickens explained, "we may see what cannot be seen under one roof elsewhere in all England, the complete manufacture of a pistol... This little pistol which is just put into my hand," Dickens continued, "will pick into more than two hundred parts, every one of which parts is made by a machine." This contrasted with the methods of gun makers "in Birmingham and other places where fire-arms are made almost entirely by hand," Dickens asserted. All the machinery was powered by a 30 horse-power engine "indefatigably toiling in the hot, suffocating smell of rank oil, down in the little stone

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<sup>67</sup> Howard L Blackmore, "Colt's London Armoury," in S.B. Saul, eds., *Technological Change: The United States and Britain in the 19<sup>th</sup> Century*, (London: Methuen & Co LTD, 1970), 171.

<sup>68</sup> A multinational corporation is defined as a business with production sites in more than one country.

chamber” on the first floor. On the second floor, Dickens entered “a long room filled with machines, and rather more redolent of hot dank oil” in which workers attended “to the boring and rifling of the barrels—having nothing to do but to watch the lathe narrowly, and drop a little oil upon the borer with a feather now and then.” Others were busy “drilling cylinders, holding locks to steam files, cutting triggers, slotting screws, treating cold iron everywhere as if it was soft wood, to be cut to any shape, without straining a muscle.” Dickens admitted “it would be difficult and tedious to describe these machines minutely, although they are very interesting to a spectator, and cannot, I believe, be seen elsewhere.” It is significant that Charles Dickens, who was quite familiar with the common machinery of British factories, placed so much emphasis on the novelty of the widespread use of machines. He also observed that the workers operating the machines required no previous background in gun making. “No recruiting sergeant ever brought a more miscellaneous group into the barrackyard,” Dickens declared. “Carpenters, cabinet-makers, ex-policemen, butchers, cabmen, hatters, gas-fitters, porters... are steadily drilling and boring at lathes all day in upper rooms,” he reported, somewhat astonished. At the conclusion of the tour, Dickens was invited to test a pistol. “After a little practice,” he reported, “I find that a mere novice may, with one hand, discharge the six rounds as rapidly as the eye can wink.” The arm he tested was part of a “new government order for the Baltic.”<sup>69</sup>

Along with the revolver Dickens fired, Colt produced nearly thirty-thousand arms in his London factory for the British market.<sup>70</sup> At the height of the Crimean War in August of 1855, the British Board of Ordnance placed its largest single order for 9,000 revolvers. Smaller orders

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<sup>69</sup> Charles Dickens, “Guns and Pistols,” *Household Words*, (May 27, 1854), reprinted in Charles T. Haven and Frank A. Belden, *A History of the Colt Revolver and the Other Arms Made by Colt’s Patent Fire Arms Manufacturing Company from 1836-1940*, (New York: Bonanza Books, 1940).

<sup>70</sup> Joseph G. Rosa, *Colonel Colt, London: The History of Colt’s London Firearms, 1851-1857*, (London: Arms & Armour Press, 1976), 100.

from the government, ranging from three to five thousand weapons came in regular monthly intervals beginning in early 1854 and lasting through the end of the war in March 1856. Colt also sold his firearms to individual officers and captains as well as the public.<sup>71</sup> An advertising leaflet from January of 1854 offered Navy and Cavalry models with 7½ inch barrels as well as three pocket models with barrels as short as 4 inches, all proudly “manufactured at Thames Bank, Near Vauxhall Bridge” in London.<sup>72</sup> But as the British military contracts dried up with the conclusion of the Crimean War the public’s consumption could not justify full production of the factory, which by 1856 was producing nearly 1,000 arms a week. In early 1857 Colt gave up the lease of his London factory and refocused his energy on his newly completed factory in Hartford, which was the largest private armory in the world.<sup>73</sup>

While it is tempting to interpret the rather short period the factory was open as a failed example of a multinational corporation, or the relatively weak extent of early forces of economic globalization, a deeper look into other simultaneous transatlantic journeys challenges that assessment.<sup>74</sup> At virtually the same time Colt travelled across the Atlantic from Hartford, Connecticut, to set up his London factory, a number of British military officials and engineers sailed in the opposite direction and embarked on extensive tours through the northeastern United States to study and purchase American machinery. The tightening networks of technological exchange and the heightened awareness of American technological innovation wrought by the

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<sup>71</sup> Blackmore, “Colt’s London Armoury,” 170-171.

<sup>72</sup> Advertisement reprinted in Haven, *A History of the Colt Revolver*, 343.

<sup>73</sup> Blackmore, “Colt’s London Armoury,” 171.

<sup>74</sup> Andrew Godley, “Pioneering Foreign Direct Investment in British Manufacturing,” *The Business History Review* Vol. 73 No. 3 (Autumn, 1999), 400. Godley simply states, “...he [Colt] was convinced that there was a substantial market for his revolvers in Britain. Rather than simply export American-manufactured guns though, Colt thought that he needed to establish his pistol factory in order to protect himself from spurious imitations in Britain and Europe. He was wrong.” Houze calls the endeavor Colt’s “most embarrassing failures,” in Herbert G. Houze, “Samuel Colt: Arms, Art, and Invention,” in Elizabeth Makin Kornhauser eds., *Samuel Colt: Arms, Art, and Invention* (New Haven: Yale University Press, 2006), 183.

Crystal Palace caused this increased attention by the British government in American production methods. The onset of the Crimean War in October 1853 further accentuated this interest, especially in gun-making machinery. British officials and engineers purchased extensive amounts of American machinery to mechanize a new armory at Enfield—including some from Colt's Hartford armory—which went into operation in the fall of 1856, just a few months before Colt sold his London factory.

Rather than being a failed example early globalization, in other words, the closing of Colt's factory was in part brought on by global flows of people, ideas, and technology that were rapidly reshaping the world in the mid-nineteenth century, especially between the United States and Great Britain. Within months of opening shop, Colt's factory was already being superseded by a British armory based on the same principles of widespread mechanization and mass production. In order to learn these principles, the British government dispatched two waves of observers to the United States in the immediate wake of the Great Exhibition. The reports these British officials produced offer important insights into the state of American technological development and the way in which technologies were transferred in the mid-1850s.

#### Our Most Attentive Study<sup>75</sup>

In the summer of 1853, the first wave of these British observers, an official Commission sent by Parliament, arrived in the United States to report on the International Exhibition held in New York. The New York Exhibition was modeled on the British example and itself embodies the heightened atmosphere of technological exchange and competition in the 1850s. The Commission was made up of six members, each of whom was assigned a specific department of

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<sup>75</sup> Nasmyth, quoted in Rosenberg eds., *The American System*, 45.

the Exhibition on which to report. When the Commission arrived in New York, the members learned that the opening of the Exhibition had been delayed from June 1 to July 14. Therefore, they decided to observe as much as they could of their respective departments by traveling throughout the United States. Two members of the Commission, Joseph Whitworth and George Wallis, toured widely across the central and northeastern states—Wallis claimed to travel “upwards of 5,000 miles”—and wrote extensive reports for Parliament on what they found.<sup>76</sup> Both men were uniquely qualified to examine and analyze technological innovations in the United States. Whitworth was widely recognized as one of the most accomplished machine-tool engineers and had already established his national reputation for inventing a standard for screw threads that became known as the British Standard Whitworth. Wallis served as the deputy commissioner of juries at the London Exhibition of 1851 and specialized in changing industrial design. At the time of the New York Exhibition he was headmaster of the Government School of Art and Design in Birmingham.<sup>77</sup> Delivering their reports to Parliament in February 1854, just as another Commission was being created to study the feasibility of adopting American machinery to a new armory at Enfield, Whitworth and Wallis would thus play an influential role in bringing about British investigations of American machinery.

Both Whitworth and Wallis emphasized the extensive use of machines in a wide range of industries across the American economy. Contrasting this aspect of American production methods with those found in Europe, Wallis described the “extraordinary ingenuity displayed in many of those labour-saving machines, whose automatic action so completely supplies the place

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<sup>76</sup> George Wallis, “New York Industrial Exhibition. Special Report of Mr. George Wallis. Presented to the House of Commons by Command of Her Majesty, In Pursuance of Their Address of February 6, 1854,” In Nathan Rosenberg, eds., *The American system of manufactures: the report of the Committee on the Machinery of the United States 1855, and the special reports of George Wallis and Joseph Whitworth 1854*, (Edinburgh: Edinburgh U.P., 1969), 206.

<sup>77</sup> Rosenberg, *The American System*, 20-21.

of the more abundant hand labour of older manufacturing countries.”<sup>78</sup> Whitworth also highlighted “the eagerness with which they call in the aid of machinery in almost every department of industry. Wherever it can be introduced as a substitute for manual labour,” Whitworth noted, “it is universally and willingly resorted to.”<sup>79</sup> Like other British travelers who journeyed through the United States in the 1850s, Whitworth and Wallis were taken aback by the extent that machines were used in American factories across the central and northeastern states. In the first paragraph of his report to Parliament, Whitworth summarized the broadest effects of widespread mechanization on American economic growth. “The vast resources of the United States are now being developed with a success that promises results whose importance it is impossible to estimate,” Whitworth cautioned. “This development, instead of being, as in former cases, gradual and protracted through ages,” he continued, “is by the universal application of machinery effected with a rapidity that is altogether unprecedented.”<sup>80</sup>

Both Whitworth and Wallis also noted examples of American machines being exported to Great Britain. After arguing that “In no branch of manufacture does the application of labour-saving machinery produce by simple means more important results than in the working of wood,” Whitworth added that a “house in Liverpool is importing the best machines of the kind in use in America, and is making great efforts to introduce them generally in England.”<sup>81</sup> While visiting the type foundry of John K. Rogers and Company in Boston, Wallis recorded a machine for casting type that was “in general use in the type foundries of the United States, and some few

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<sup>78</sup> Wallis, “New York Industrial Exhibition,” 203.

<sup>79</sup> Joseph Whitworth, “New York Industrial Exhibition. Special Report of Mr. Joseph Whitworth. Presented to the House of Commons by Command of Her Majesty, In Pursuance of Their Address of February 6, 1854,” in Nathan Rosenberg, eds., *The American System of Manufactures: the Report of the Committee on the Machinery of the United States 1855, and the Special Reports of George Wallis and Joseph Whitworth 1854*, (Edinburgh: Edinburgh U.P, 1969), 387.

<sup>80</sup> *Ibid.*, 331.

<sup>81</sup> *Ibid.*, 343.

have been lately exported to England.”<sup>82</sup> These examples were noteworthy for two British specialists who were accustomed to machinery flowing from Great Britain to the United States, not the other way around. These statements illustrate the years surrounding the Crystal Palace of 1851 witnessed a new appreciation of American technological prowess and competition by British observers.

Both Wallis and Whitworth weighed in on various factors that encouraged the widespread mechanization of the American economy compared to Europe’s. Both men noted the relative shortage and thus high cost of labor compared to Europe, an explanation that was common at the time, but they also contributed more original ideas. After visiting the Patent Office in Washington, D.C., Whitworth included a lengthy chapter on the detailed workings of the American patent system in his report. He also highlighted new innovations in corporate law. “The law of limited liability affords the most ample facilities for the investment of capital in business,” Whitworth explained, “and the educated artisan is equally free to earn all he can.”<sup>83</sup> Wallis pointed to the “well-directed attention paid to the education of the whole people by the public-school system” of the northern states.<sup>84</sup> In the Introduction to his report, Wallis also defined a sort of feedback-loop he noticed in studying factories and talking with American mechanics. “The successful application of mechanical means to one manufacture has been, as a matter of course, stimulative of their application to another,” Wallis explained. This “adaptive versatility,” as he called it, was a key factor in American innovation.<sup>85</sup> Finally, he emphasized the attention Americans paid to technological developments in Europe. “No fact appears more

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<sup>82</sup> Wallis, “New York Industrial Exhibition,” 240.

<sup>83</sup> Whitworth, “The New York Industrial Exhibition,” 389.

<sup>84</sup> Wallis, “New York Industrial Exhibition,” 203.

<sup>85</sup> *Ibid.*, 203.

certain than that the manufacturers of the United States take especial care to be well informed on all European improvements,” Wallis argued, “either in machinery or in processes.”<sup>86</sup>

Whitworth and Wallis delivered their reports to Parliament in February 1854, just months after the outbreak of the Crimean War, an event that sparked more conversations about American mechanization among British military and engineering circles. Up to that point, the British supplied its military arms by contracting with private manufacturers, primarily located in Birmingham. Each part of the arm was hand-made by highly-skilled craftsmen who specialized in the construction of a single piece of the weapon. The various parts were then collected, tested, and assembled. This system had been in use since the Napoleonic wars, and was now proving exceedingly sluggish. For example, the British government ordered 23,000 arms in May 1851, but they were not delivered until November of 1854. During this same period, each of the two government armories in the United States were producing 30,000 machine-made arms a year based on the widespread application of machinery to the production process. All parts of the arm were made under one roof. Colt’s London factory followed the same methods.<sup>87</sup> With the outbreak of the Crimean War, the old contract system based on hand-made weapons proved wholly inadequate to supply the British military and Parliament established a Select Committee on Small Arms to find a remedy to the situation. Thanks to the United States’ increased visibility at the Crystal Palace, Colt’s London factory, and the reports of Whitworth and Wallis, the Committee carefully considered whether to restock a national armory based on the widespread mechanization of production found in American factories.

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<sup>86</sup> Ibid., 207.

<sup>87</sup> Rosenberg, *The American System*, 30-40. The 30,000 was reported by the Select Committee on Small Arms and is cited in David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States*, (Baltimore: Johns Hopkins University Press, 1984), 18.



The Select Committee held hearings between March 10 and April 24 of 1854 and interviewed a number of experts familiar with American armory practices, including Whitworth and Wallis, as well as British military officials and engineers who had already visited Colt's London factory. When questioned about the application of British wood-working machinery that Whitworth himself had invented in the late 1840s to the production of firearms, Whitworth pointed the Committee to the United States. "It is not so well adapted for a musket," he admitted, "as the machinery which I saw in America."<sup>88</sup> Having just returned from extensively touring the factories of the United States, Whitworth and Wallis both testified on the efficiency of machine-production in lower costs and expanding production. James Nasmyth, a prominent Scottish engineer who invented the steam hammer in the early 1840s, testified about what he found at Colt's London factory. "It produced a very impressive effect, such as I shall never forget," Nasmyth described. When asked by the Committee if it was advisable "to get some of the machines that are used in America," Nasmyth responded, "I think, from what I have seen at Colonel Colt's, that their system of tool-making...entitle the American tools and machinery to receive our most attentive study and consideration."<sup>89</sup> Lieutenant-Colonel James S. Tulloh also urged the Committee to adopt specialized machinery found at Colt's London factory. "The principle of substituting machinery for labour is established beyond a doubt," Tulloh announced, "but if any proof were wanting in this respect, it will be found by a visit to Colonel Colt's manufacture of the American revolving pistol."<sup>90</sup> Sir Thomas Hastings, the comptroller of stores of the Board of Ordnance and a member of the audience during Colt's address to the Institute of Civil Engineers, admitted to the Committee he had initially been opposed to the idea of a

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<sup>88</sup> Whitworth, quoted in Rosenberg, *The American System*, page 49.

<sup>89</sup> Nasmyth, quoted in Rosenberg, *The American System*, 45

<sup>90</sup> Tulloh, quoted in Hounshell, *From the American System*, 347.

mechanized armory but “became a convert” after visiting Colt’s London factory.<sup>91</sup> John Anderson, a senior engineer at the British armory at Woolwich, also paid respect to what he found at Colt’s. “I went to Colonel Colt’s factory with high expectations, and in the hope of carrying away some of their mechanical notions that might be applicable in our own service,” Anderson explained, “and I did not leave with disappointment.” He went on to describe the “almost perfect system” he found in which “each piece is produced in proportionate quantity by machinery.” Like Nasmyth and Hastings, Anderson concluded “There is also much that is new in England...indeed it is impossible to go through that work without coming away a better engineer.”<sup>92</sup>

Encouraged by the expert’s testimony, the Small Arms Committee authorized the Board of Ordnance to construct a new manufactory at the Enfield armory based on what was beginning to be called the “American system” of mechanized arms production. In turn, the Board of Ordnance appointed a committee to visit the United States to both study American machinery and purchase whatever was deemed desirable for the expansion of the Enfield armory. John Anderson, who testified on the efficacy of Colt’s methods, was appointed the Ordnance Inspector of Machinery and authored a detailed report both on what the Committee found in the United States and the American machinery the Committee purchased. Like those of Whitworth and Wallis, Anderson’s report offers important insights into how British engineers came to realize the technological expertise and the broader threat to British economic superiority of the United States in the wake of the Crystal Palace exhibition.

Anderson arrived in Boston on April 26, 1854, and after conferring with both Samuel Colt and Joseph Whitworth on establishments to visit, set about touring the northeast of the

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<sup>91</sup> Hastings, quoted in *Ibid.*, 347.

<sup>92</sup> Anderson, quoted in *Ibid.*, 45-46.

United States. Anderson travelled to dozens of machine shops, factories, and government establishments, from the Philadelphia Navy Yard to the gun factory of Robbins and Lawrence at Windsor, Vermont. After being invited by Robert E. Lee to examine the cadets at West Point, he took the opportunity to visit the nearby “foundry and machine shop belonging to Mr. Kemble at Cold Springs.” Like all the places he visited, Anderson recorded anything novel or innovative. “In these works anthracite coal is used in a furnace of a peculiar construction,” Anderson noted, “a drawing of which was procured.”<sup>93</sup> Near Niagara Falls, Anderson visited a “manufactory of wooden pegs for shoemaking, in which they were produced in immense quantities and at a very low price by machinery.”<sup>94</sup> But since “the principal object... in visiting the United States of America being in connection with the proposed armory,” he directed his attention “more especially to everything relating to small arms and their manufacture.”<sup>95</sup>

By the time Anderson departed in September 1854, he and his fellow Committee members had extensively toured both of the American national armories at Harper’s Ferry and Springfield, as well as dozens of private armories, including those of Remington’s at Utica, New York, Sharpe’s and Colt’s at Hartford, Connecticut, and Deringer’s at Philadelphia, Pennsylvania. His report included twelve pages detailing the more than 200 machines purchased for the new armory at Enfield and the Royal Carriage Department at Woolwich arsenal. These machines ranged in size and price from small filing jigs costing fifteen dollars to the massive machine designed to groove a ramrod, which was purchased from the Ames Manufacturing

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<sup>93</sup> John Anderson, “Report of the Committee on the Machinery of the United States of America. Presented to the House of Commons, In Pursuance of Their Address of the 10<sup>th</sup> July, 1855,” in Nathan Rosenberg, eds., *The American System of Manufactures*, 107.

<sup>94</sup> *Ibid.*, 114.

<sup>95</sup> *Ibid.*, 119.

Company for \$2,700. These machines arrived in Great Britain between the winter of 1854 and the summer of 1855 and would form the backbone of the new armory at Enfield.

Like Whitworth and Wallis, Anderson took the opportunity in his report to expand beyond the details of novel machines and monetary transactions and reflect on the wider implications of what he called the “American System.” In this moment of heightened technological transfer inaugurated by the Crystal Palace exhibition and the growing awareness of American innovations, Anderson emphatically called on his fellow Britons to pay attention. “In the adaptation of special apparatus to a single operation in almost all branches of industry,” Anderson began, “the Americans display an amount of ingenuity, combined with undaunted energy, which as a nation we would do well to imitate, if we mean to hold our present position in the great market of the world.”<sup>96</sup> In his conclusion, Anderson reiterated this warning. “Unless the example is followed at home,” he cautioned, “it is to be feared that American manufacturers will before long become exporters not only to foreign countries, but even to England.”<sup>97</sup> Predating cries of Americanization proclaimed by Britons like William Stead in the early 1900s by nearly half-a-century, Anderson’s remarks illustrate how important the events surrounding the Crystal Palace were in exciting the British public and government to the threat American technological developments posed.

It is important to note, though, that Anderson did not advocate a retreat inward or a boycott of American goods in response to this newly recognized competition. If the 1850s represents a heightened awareness of an American challenge, it also represents a moment of increased technological exchange and synergy. Indeed, in addition to purchasing and bringing back American hundreds of American machines, Anderson was authorized by the Board of

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<sup>96</sup> Ibid., 129

<sup>97</sup> Ibid., 193.

Ordnance to hire the American engineer and Master Armorer of the Harper's Ferry Armory James H. Burton, as well as a number of other American mechanics to help set up the new factory at Enfield.<sup>98</sup> Burton arrived in Great Britain in 1855 and by 1856 the new machine shop of the Enfield armory was completed. While it was too late to contribute arms to the Crimean War, which ended in March of 1856, by 1857 the Enfield armory was, according to Anderson's testimony, producing 1,000 muskets a week, a huge improvement on the old putting-out system that so hampered the adequate supply of firearms before the Crimean War.<sup>99</sup> The American James Burton would oversee the armory until the winter of 1860, when the looming storm of the Civil War drew him back to his native Virginia.<sup>100</sup> Like Samuel Colt, Burton would benefit from the upsurge of interest in American machinery inaugurated by the Crystal Palace exhibition and bring American machines and methods to the factories of Great Britain.

The construction of the new factory at the Enfield Armory marks a crucial moment in the relationship between the United States and Great Britain. On the one hand, it reveals the eclipse of Great Britain by the United States in technological innovation, while on the other it represents a tightening relationship as both nations anxiously studied and learned from each other. And gun-making machinery was only one example of this increased synergy. Along with Colt and Burton, a whole wave of American engineers and entrepreneurs flooded Great Britain in the wake of the Crystal Palace.

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<sup>98</sup> Anderson, "On the Application of Machinery." In this article, Anderson wrote that "in order to insure perfect success, the details are being carried out by an American gentleman, brought over by the government, who possesses a thorough and practical experience in the working of this system in the United States, and who has the assistance of several of his own countrymen, from the small-arms factories of New England," 156.

<sup>99</sup> *Ibid.*, 156.

<sup>100</sup> For Burton, pre-Civil War see Merritt Roe Smith, *Harpers Ferry Armory and the New Technology*, (Ithaca: Cornell University Press, 1977). For Civil War, see Matthew W. Norman, "James H. Burton and the Confederate States Armory at Macon," *The Georgia Historical Quarterly* 81, no. 4, (1997).

Along with Colt and his London factory, two men benefited directly from their exposure at the Crystal Palace. First, McCormick capitalized on his success at the exhibition and engaged in a licensing arrangement in late 1851 with the British company, Burgess & Key, to build and sell his reaper.<sup>101</sup> In turn, the firm paid McCormick royalties on sales. McCormick would also directly export more and more of his American-made reapers as the decade went on.<sup>102</sup> By 1870, it was printing its catalog in several different languages and by the 1890s, its successor, International Harvester, was selling products to all corners of the globe.<sup>103</sup> McCormick's success in the 1850s thus marked a major launching off point for its expansion into foreign markets.

The other American to build directly upon success at the Crystal palace was Alfred Hobbs. After achieving notoriety for picking the “unpickable” Bramah lock, Hobbs built upon the buzz by forming a partnership with a British entrepreneur, called Hobbs, Ashley and Company. Like Colt, Hobbs would bring American machinery to a new factory established in Cheapside, London, which pioneered the introduction of mass-production methods to the construction of locks. An article in *The Engineer* that appeared in March of 1859 described a “compact brick building of three storeys” in which “an almost automatic arrangement of the machinery employed” led to “the manufacturing of locks on a large scale.” The author, who was given a tour of the factory by Hobbs himself, contrasted the methods employed by British lock makers with those of Hobbs. “In Wolverhampton—the principal seat of the lock trade—the manufacture is still conducted for the most part by hand labour,” the article notes. In contrast, “Mr. Hobbs system of manufacture” was based upon the widespread use of machinery. The

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<sup>101</sup> Mira Wilkins, *The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914* (Cambridge, Mass, Harvard University Press, 1970).

<sup>102</sup> See D. L. Burn, “The Genesis of American Engineering Competition, 1850-1870,” in S.B. Saul, eds., *Technological Change: The United States and Britain in the 19<sup>th</sup> Century* (London: Methuen & Co LTD, 1970), 83.

<sup>103</sup> On the international aspects of McCormick's sales and advertising techniques, see Mona Domash, *American Commodities in an Age of Empire*, (New York: Routledge, 2006), especially chapter 4.

article described a typical lock, which consisted “of thirty distinct parts or pieces of iron and brass, each of which has been fashioned by automaton machinery, entirely without the aid of hand-labour.” The article then connected Hobbs’ methods with those of Colt’s London armory when it outlined “the system of working from standard gauges, which has been so successfully applied both by Colonel Colt and Mr. Hobbs.”<sup>104</sup> Articles like these were important in exposing the wider British engineering community to American methods of production.

While McCormick, Hobbs, and Colt penetrated British markets in the immediate aftermath of the Crystal Palace, several other American mechanics and businessmen set up shop as the decade wore on. In 1856 five Americans, led by the New Jersey based entrepreneur Henry Lee Norris, formed what would become the North British Rubber Company Ltd. and opened a factory in Edinburgh, Scotland, for the construction of vulcanized rubber products. The factory was stocked with American machinery and by 1860 controlled 10 percent of the British market for rubber products.<sup>105</sup> Also in 1856, the American Francis Watkins formed a partnership with the British businessman Arthur Keen and established the Patent Nut and Bolt Company in Birmingham. The company imported American machinery designed for mass production and was an immediate success.<sup>106</sup> The Birmingham gun trade was also transformed by the introduction of American machinery. Following the mechanization of the government factory at Enfield, fourteen prominent gunsmiths formed the Birmingham Small Arms Company and hired an American, Cory McFarland, to organize a new factory based upon machinery imported from the United States.<sup>107</sup>

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<sup>104</sup> “Hobbs’ Lock Manufactory,” *The Engineer*, (March 18, 1859):188-191, accessed March 3, 2017, <http://www.gracesguide.co.uk/images/5/51/Er18590318a.pdf>.

<sup>105</sup> Godley, “Pioneering Foreign Direct Investment.” Also see William Woodruff, “The American Origins of a Scottish Industry,” *Scottish Journal of Political Economy* Vol. 2, (1955).

<sup>106</sup> Burn, “The Genesis,” 86.

<sup>107</sup> Russell I. Fries, “British Response to the American System: The Case of the Small-Arms Industry after 1850,” *Technology and Culture*, 16, no. 3, (1975).

As these examples illustrate, there were three distinct ways American businessmen and mass-production methods penetrated British markets in the 1850s. First, Americans could open factories stocked with imported American machinery. While these could be fully owned by American companies, such as Colt's London factory, they could also be run by partnerships between American and British entrepreneurs, like Hobbs's lock-making factory. They could even be owned by British companies created by Americans, such as the factories of the North British Rubber Company and the Patent Nuts and Bolt Company. Second, American entrepreneurs could sign licensing agreements with British firms, as McCormick did in 1851 and Singer Manufacturing Company did later in the decade.<sup>108</sup> Third, American engineers could mechanize the production processes of British factories, as James Burton helped achieve at the government-run armory at Enfield and Cory McFarland did with the Birmingham Small Arms Company. Together, these business endeavors mark the first major wave of expansion of American businesses into Europe. Like many European travelers to the United States predicted, in many ways the 1850s marked the beginning of a new era in the diffusion of technology and the strength of American economic power.

The patterns set by the pioneering American companies and entrepreneurs of the 1850s would be expanded upon by American innovators in the decades that followed. Like Colt, the Singer Manufacturing Company would open a British plant in the 1860s to produce for European markets, while in the same decade George Pullman signed a fifteen-year contract to supply the British Midland Railway Company with American built railcars.<sup>109</sup> The Edison Electric Light Company would follow the example of McCormick and sell patent licenses to various European

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<sup>108</sup> For Singer in the 1850s, see Burn, "The Genesis," 83.

<sup>109</sup> For Singer in the 1860s and beyond, see Wilkins, *The Emergence*, 42, and for Pullman, see Godley, "Pioneering," 411.



firms in the early 1880s.<sup>110</sup> In the 1890s the British shoe industry faced the same challenge the British firearms industry faced in the 1850s. Confronted with the growing competition of cheap mass-produced footwear from the United States, British shoe producers were forced to study and import American machinery in order to compete.<sup>111</sup>

By the turn of the century, the United States economy had ballooned into the largest in the world and continued to pioneer innovations in new technologies like electricity and chemicals. In 1901, the British journalist William Stead announced the “Americanization of the world” as American products flooded global markets and the United States began to take a more active role on the world stage. While other Britons decried the “American invaders,” Stead congratulated Americans for beating the British in the latest technologies.<sup>112</sup> “That they are willing and ready to supply us is a thing we should be grateful for,” he told his British audience.<sup>113</sup> Stead also noticed “encouraging signs” and reassured his readers that enterprising Britons were not simply sitting still watching Americans pass by. “For the last twelve months there has been a constant pilgrimage across the Atlantic from the Old Country,” he explained, “in which our manufacturers, our railway managers, our ship-builders, our iron-makers, our merchant princes, have been wending their way to the United States for the purpose of learning the secret by which the Americans are beginning to beat us in our own market.”<sup>114</sup>

Yet as we have seen, the “Americanization of the world” did not begin the 1890s, nor even the 1870s; its roots lie deep in the mid-nineteenth century. The British entrepreneurs who embarked on a “pilgrimage across the Atlantic” in the early twentieth century traveled a well-

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<sup>110</sup> Harm G. Schroter, *Americanization of the European Economy: A Compact Survey of American Economic Influence in Europe Since the 1880s*, (New York, Springer, 2005), 20.

<sup>111</sup> *Ibid.*, 19.

<sup>112</sup> Fred A. McKenzie, *The American Invaders: Their Plans, Tactics, and Progress*, (New York: Street & Smith, 1901).

<sup>113</sup> Stead, *The Americanization of the World*, 351-2.

<sup>114</sup> *Ibid.*, 357.

worn path that was first laid down in the 1850s. Conversely, the American entrepreneurs who “invaded” Europe also followed a long line of American technical and mechanical experts that pushed out into Europe during the 1850s. These dual waves created by the Crystal Palace exhibition of 1851—the wave of Americans opening businesses in Great Britain and the wave of Britons studying the latest American technology—represent a pivotal turning point in the history of technological transfer between the United States and Great Britain. While the most innovative technologies of the first half of the nineteenth century, from the growing application of steam-power to the mechanization of textile-production, generally flowed out from Great Britain, by the 1850s the tides had shifted as the most technologically sophisticated machines and production processes were spreading rapidly from the United States to Great Britain. The Crystal Palace exhibition marks a sharp dividing line between these two periods.

While the events surrounding the Crystal Palace forced British observers to recognize that the United States had surpassed Great Britain in many aspects of technological innovation, they also encouraged Britons to think of the two nations as part of larger whole. The sudden appreciation of the economic innovation and dynamism of the United States during the 1850s and the sense that it was “bursting into greatness” demanded a sometimes begrudging respect from Britons. The language employed by the British press such as “our cousins” and “our descendants across the Atlantic” served to lessen the blow to British pride and built an imagined bridge between the two nations. This shift in the way Britons discussed and described the United States in the wake of the Crystal Palace marks the formation of important cultural foundations for the special political relationship that would bind the two nations in the later decades of the century.

The competitions involving reapers, locks, and yachts held throughout the summer of 1851 between the United States and Great Britain, together with the transatlantic journeys that followed, represented much more than friendly rivalries between two nations. On a broader level, these competitions marked an important moment in the exchange of technological information that began to quicken pace in the mid-nineteenth century. As historians have begun to think of globalization as a process in which the world becomes more and more integrated, many have highlighted the 1850s as a key decade when these processes accelerated.<sup>115</sup> The spread of the telegraph, railroads, and steamboat travel linked the world, but especially the United States and Great Britain, in ever tightening networks of exchange. Perhaps the most visible symbol of these increasing connections was the laying of the first transatlantic cable, through which Queen Victoria congratulated President Buchanan on August 16, 1858.<sup>116</sup> But equally important to the physical connections linking the world together was the intellectual appreciation of these processes. The Crystal Palace played a seminal role in raising awareness of a world in which technological exchange was becoming not only normal but essential to the long-term viability of nation-states. On the broadest level, the transatlantic travels that ensued in the wake of the exhibition also offer insight into the relationships between “core” nations as they continued to industrialize through the mid-nineteenth century and point to a more prominent place of the United States in these relationships than the traditional narratives of American economic growth allow.

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<sup>115</sup> See footnote 38.

<sup>116</sup> John Steele Gordon, *A Thread Across the Ocean: The Heroic Story of the Transatlantic Cable*, (New York: Walker & Co., 2002).

### Chapter Three: Samuel Colt and the World

Of all the American inventors, engineers, and businessmen who invaded Great Britain in the wake of the Crystal Palace, none achieved more success in their lifetime than Samuel Colt. Shortly after opening his British factory on the Thames in 1853, Colt began construction on another, more massive establishment in his hometown of Hartford, Connecticut. When completed in 1855, it was the largest private armory in the world.<sup>1</sup> With the help of his visionary mechanic Elisha K. Root, it was also one of the most technologically sophisticated, containing dozens of state-of-the-art metalworking machines to mass produce the guns by the hundreds of thousands. Many of these weapons flooded into western U.S. states and territories, including the newly acquired Mexican Cession. They also travelled throughout the world. While gold-miners relied on them in the hills of California, the Russian navy carried them in Crimea and the Second King of Siam tested them at his palace in Bangkok. By the time of Colt's death in January 1862, his firearms were one of the most widely-distributed mass-produced goods in history.

In achieving this global distribution, Colt emerged in the 1850s as a new type of American actor on the world stage—the international businessman. He pioneered new advertising techniques to associate his guns not only with the American west but also the Brazilian rainforest. He conducted extensive business trips through Europe and the Middle East and was deeply entwined in the international affairs of the day. Sometimes Colt's influence travelled as part of official American state business, as when Commodore Mathew Perry took dozens of Colt's presentation pieces to offer dignitaries on his mission to open trade relations

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<sup>1</sup> Barbara M. Tucker and Kenneth H. Tucker Jr., *Industrializing Antebellum America: The Rise of Manufacturing Entrepreneurs in the Early Republic*, (New York: Palgrave Macmillan, 2008), 84. The authors estimated based on the number of weapons produced in Colt's lifetime compared to other large armories.

with Japan. More often, Colt moved beneath the state, like when he sold tens of thousands of weapons to Giuseppe Garibaldi to assist in his efforts to unify the Italian peninsula. Through novel advertising practices and prolific gift-giving, he tirelessly worked to associate his name with the spread of American influence around the world. At a gala in May of 1856, his fellow Hartford businessman William Hamersley could proudly announce, “the name of Samuel Colt is now more widely known throughout the world than that of any other living American inventor.”<sup>2</sup>

While Colt’s firearms went out into the world, the world came back into Hartford. Just a few hundred yards from his factory, Colt erected an enormous three-story mansion christened Armsmear, completed in February 1857.<sup>3</sup> Only forty-two when he moved in, Colt could gaze out a window on the south side of his home to overlook one of the most technologically sophisticated industrial sites in the world, whose products could be found from the Ottoman Empire to Brazil to Siam. But Colt could also turn from the window overlooking his factory and walk down the hall to the music room, where he displayed a panoply of gifts from around the world. An ornate Turkish snuffbox sat beside a diamond-encrusted Russian ring, lavish Japanese lacquerware adorned the tables, and a large mahogany cabinet exhibited medals and other honors from around the world. The aesthetics of the home itself, moreover, reflected the impact Colt’s travels had on his identity. Exotic Russian minarets peppered the roof, luxuriant Persian fabric adorned French chairs, and tropical fruit from the Caribbean thrived in the conservatory. Colt’s

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<sup>2</sup> Deane J. Aldean, eds., *Proceedings at the Dedication of Charter Oak Hall Upon the South Meadow Grounds of Col. Samuel Colt. With the Addresses on the Occasion By Messrs. Hamersley, Stuart, and Deming*, (Hartford: Press of Case, Tiffany and Company, 1856), 10, accessed March 5, 2017, <https://babel.hathitrust.org/cgi/pt?id=loc.ark:/13960/t0gt63v3k;view=1up;seq=9>.

<sup>3</sup> Description of Colt property and date of opening of Armsmear in Henry Barnard, *Armsmear: The Home, the Arm, and the Armory of Samuel Colt*, (New York: Alvord Printer, 1866), accessed April 5, 2017, <https://babel.hathitrust.org/cgi/pt?id=uc1.31822011848074;view=1up;seq=16>. Barnard toured the house and conducted extensive interviews with Colt’s family just four years after Colt’s death.

home served as a living symbol of the blurred lines that ostensibly separated the United States from the world.

This chapter takes Colt as a case study. An examination of Colt's life in Hartford and his international business and trade dealings sheds light on the complex ways Americans interacted with the wider world in the mid-nineteenth century. While the United States is often depicted as isolated or inward looking in the antebellum years, Colt's experience paints a more nuanced picture. Colt's weapons embodied American technological superiority that attracted global attention; their spread around the world constituted a key part of the United States' outward thrust in the 1850s. At the same time, external forces, cultures, and trends had a profound influence on Colt's life in Hartford, transforming what it meant—and looked like—to be an “American” businessman. Far from insular, the United States of the 1850s was both penetrating the world with its products and being reshaped at home in new ways, twin processes that would be amplified in coming decades.

#### In Better Condition: 1814-1848

Samuel Colt was born in Hartford, Connecticut in 1814 to a family of merchants and businessmen. The Colts had deep roots in the area. His relatives were among the original settlers to migrate to Windsor, Connecticut in the 1630s. His family later played a key role in the spread of mechanized textile-production across the Atlantic. His grand-uncle, Peter Colt, was an original founder of the Hartford Woolen Manufactory Company in 1788 before acquiring control of the Establishment of Useful Manufactures in Paterson, New Jersey in 1810. His son, Roswell Colt, became governor of the society shortly thereafter. Roswell used his position to expand his business interests in the region, engaging in land speculation and development of water-power

sites on the Passaic River.<sup>4</sup> Samuel Colt would rely on the connections and financial resources of his older cousin Roswell throughout his early career.<sup>5</sup>

Samuel's father, Christopher Colt, was a merchant from Hartford that sold East India sugar, chocolate, and coffee, as well as tobacco, hardware, and cloth. Although Christopher lost his business following the Panic of 1819, by 1829 he had recovered financially, becoming the sales agent of a textile mill in Ware, Massachusetts.<sup>6</sup> Samuel briefly worked in the mill before Christopher and his second wife, Olive, sent him to a private academy specializing in classical education north of Hartford in Amherst, Massachusetts in 1830.<sup>7</sup> It seems the young Samuel had lost his patience for schooling, as he returned home after only a few months before joining the crew of the brig *Corvo*, which sailed from Boston on August 2, 1830 on a trading mission to India.<sup>8</sup> He later claimed the locking-mechanism attached to the wheel of the ship gave him the idea to design the world's first functioning revolver.<sup>9</sup>

When he returned home in the summer of 1831, Samuel Colt commissioned prototypes of his revolver with whatever money he could scrap together. Sometime in early 1832, in order to raise money, he began traveling the country as "Dr. Coult," a "practical Chemist" from "New York, London, and Calcutta," to administer nitrous oxide—or laughing gas—to audiences in halls and theaters from Novia Scotia to New Orleans.<sup>10</sup> Colt seemed to have found some

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<sup>4</sup> Tucker, *Industrializing*, 17-24.

<sup>5</sup> Colt's early correspondence contains numerous letters from Roswell Colt. See Samuel Colt Papers, Box 1, Connecticut Historical Society. Hereafter Colt CHS.

<sup>6</sup> William N. Hosley, *Colt: The Making of an American Legend*, (Amherst: University of Massachusetts Press, 1996), 15.

<sup>7</sup> Samuel begins receiving letters from his step-mother at Amherst in June of 1830, Colt CHS, Box 1.

<sup>8</sup> Herbert G. Houze, "Samuel Colt: Arms, Art, and Invention," in Houze, Herbert G., Carolyn C. Cooper, and Elizabeth Mankin Kornhauser, *Samuel Colt: Arms, Art, and Invention*, (New Haven: Yale University Press, 2006), 17-202, 43.

<sup>9</sup> Stuart references this story in his dedication of Charter Oak, Aldean, *Dedication*, 35. Elizabeth Colt would later have a statue commissioned of Colt as a young boy in a sailor's outfit carving a revolving cylinder out of wood. The statue can still be seen at the city park that occupies part of Colt's old property.

<sup>10</sup> Quotes from piece of advertising from Portland, Maine, October 13, 1832, in Samuel Colt Papers, Box 55, Folder 2, Connecticut State Library. Hereafter Colt CSL.

financial success; between 1832 and 1835 he commissioned prototypes from a number of different gun-makers to translate his vision into reality. Yet during this same period, he also wrote home begging for money on multiple occasions. His older cousin, Roswell Colt, loaned him thousands of dollars in the early 1830s.<sup>11</sup> And in September of 1834, Colt was even desperate enough to write his father hoping “for charity’s sake that mother would forward my shirts to me.” In closing the letter, he begged his father, “Can you get any money from the Hartford banks?”<sup>12</sup>

Despite his tribulations, by the end of 1835 Colt had succeeded in his quest to commission a working prototype of his revolving firearm. He then used his family connections to start a business. Roswell Colt put him in touch with Henry Ellsworth, who had just been appointed head of the Patent Office.<sup>13</sup> With this connection made, the gears began to turn quickly. On February 21, 1836, Colt secured a United States patent for an “Improvement in Firearms.” Roswell and Elisha Colt, a prominent local banker, helped attract capital, and by early March the State of New Jersey issued a charter to the Patent Arms Manufacturing Company.<sup>14</sup> The company began production at a factory in Paterson, New Jersey, Roswell’s seat of operations, in December 1836.

Colt’s position in the company was essentially that of a salesman. In the first few years after establishing the company, Colt spent months at a time working to secure government contracts in Washington, D.C. He also toured the northeast selling small numbers of his weapons to local arms dealers. Achieving little success, he decided to travel to Florida in 1838 during the

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<sup>11</sup> See Roswell and Samuel’s correspondence in Colt CHS, Box 1.

<sup>12</sup> Samuel Colt to Christopher Colt, New York, September 13, 1834, Colt CHS, Box 1, Folder 2.

<sup>13</sup> Tucker, *Industrializing*, 56.

<sup>14</sup> Date of Patent in Colt CSL, Box 45, and date of incorporation in letter of congratulations from Christopher to Samuel Colt, Hartford, March 14, 1836, Colt CHS, Box 1, Folder 6. The early investors were almost all close friends and business associates of Roswell and Elisha.



height of the Second Seminole Indian War, hoping to convince U.S. military leaders there of the superiority of his weapons. The plan worked, and in March, Lieutenant Colonel William S. Harney became the first active military official to endorse Colt's arms. Harney convinced his superior, Major General Thomas Jesup, to authorize the purchase of fifty Number 1 Rifles for his troops in Florida.<sup>15</sup>

But if the endorsement and orders allowed the Patent Arms Manufacturing Company to limp along for a few more months, the sharp economic downturn of 1839 abruptly reversed this forward progress. Production at the company's factory slowed dramatically in 1840 while sales stagnated. Legal fights within the company then arose as a major stockholder and Treasurer of the company, Dudley Seldon, abruptly resigned in 1841. His replacement then began to illegally sell the Company's stock to pay previous debts, which prompted other board members to sue. These financial and legal problems persisted through January 1842, when the Patent Arms Manufacturing Company's assets were finally liquidated.<sup>16</sup>

On the surface, Colt's initial entrance into the production of firearms had been a failure. He was unable to secure government orders substantial enough to turn a profit. This was mostly due to the prohibitively high cost of the arms he produced. The revolving mechanism that made them unique was overly complex. It was composed of many small pieces that were time-consuming and expensive to fabricate, especially because most of their construction was done by hand.<sup>17</sup> Priced between \$45 and \$60 (more than \$3,500 in 2018 dollars), they cost more than

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<sup>15</sup> See the letter from Col. Harney to Samuel Colt, February 15, 1838 in Colt CHS, Box 1, Folder 11, CHS.

<sup>16</sup> Houze, *Samuel Colt*, 67.

<sup>17</sup> Broadside Catalogue of Machinery and Tools in Paterson, illustrated in Philip Phillips, *Paterson Colt Pistol Variations*, (Dallas: Jackson Arms, 1979). Historians and collectors who specialize on early Colt firearms agree there was very little specialized machinery used in the Paterson Colts based on this picture, the rate at which they were produced, and the lack of any evidence in correspondence or sales records to indicate use of machinery.

double what the U.S. government was used to paying for small arms.<sup>18</sup> The high cost priced Colt out of the private market as well. Because he was essentially a traveling salesman, moreover, Colt did not have the time to focus on improving design and reducing costs.

Even though his Paterson company failed, Colt emerged from the experience with a heightened appreciation that improved product design and lower prices were crucial ingredients to the future success of his revolvers. When new opportunities arose following the outbreak of war with Mexico in 1846, Colt would apply the lessons learned during the Paterson years to achieve more lasting success.

Colt spent the years between 1841 and 1846 in New York City pursuing other inventions and networking with scientists, businessmen, and government officials. By 1842 he had perfected the means of detonating underwater mines using submarine cables. Promoting the mines as a cost-effective system of harbor defense, he lobbied Congress for support, only to abandon the plan in 1844 as government orders failed to materialize.<sup>19</sup> He had more success with waterproof tinfoil cartridges. After extensive trials, the U.S. Navy Board of Ordnance placed a small order in 1843.<sup>20</sup> During this period Colt rented a studio at New York University where he ran experiments and collaborated with Samuel Morse on perfecting underwater cables capable of transmitting telegraph messages.<sup>21</sup> In September 1845 Colt secured funding from the New York merchant William Robinson and formed the Colt & Robinson New York and Offing Electro-Magnetic Telegraph Company, which produced underwater cables.<sup>22</sup>

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<sup>18</sup> Estimate and conversion for price of firearms in Hosley, *American Legend*, 21. Double based on what government paid for larger Colt orders in the late 1840s.

<sup>19</sup> Philip K. Lundenberg, *Samuel Colt's Submarine Battery: The Secret and the Enigma*, (Washington, D.C.; Smithsonian Institution Press, 1974) discusses this period in detail. For lobbying, see Letter of Samuel Colt to the Honorable Henry C. Murphy, Committee on Naval Affairs, House of Representatives, June 3, 1844, at Washington City, Colt CHS, Box 6.

<sup>20</sup> See correspondence between Colt and Navy Board of Ordnance, Colt CHS, Box 3.

<sup>21</sup> See letters from Colt to Morse in Colt CHS, Box 5.

<sup>22</sup> Samuel Colt and William Robinson, Articles of Partnership, September 28, 1845, Colt CHS, Box 5.

Although none of the three major ventures Colt pursued in these years achieved notable success, he managed to keep his name in the orbit of military officials in Washington with his underwater mines and tinfoil cartridges. He also embedded himself in the scientific networks that surrounded New York University. In addition to conducting experiments in his studio space at the university, he was a corresponding member of the National Institute for the Promotion of Science as early as 1840, and a member of the New York based American Institute.<sup>23</sup> During this period, perhaps most notably, Colt also continued to redesign his revolver during this period.<sup>24</sup> While little evidence exists regarding the details of these designs, when Colt reemerged as a gunmaker, he produced a simpler and more streamlined product. By the mid-1840s, as war between the United States and Mexico loomed, Colt had become poised to capitalize on the conflict.

Between the U.S. annexation of Texas in December 1845 and the outbreak of war between the United States and Mexico in May 1846, Colt sought out funding for an improved revolver. He wrote his father in January 1846 seeking “a little money invested in machinery [sic],” but his father declined.<sup>25</sup> By the autumn of 1846, however, Colt had managed to scrap together enough cash to commission Blunt & Syms of New York to construct a prototype, which he promptly sent to the War Department.<sup>26</sup> The revolver caught the attention of Captain Samuel H. Walker, who had just returned to Washington, D.C., from the frontlines of Texas to order more weapons. Walker promptly travelled to New York City to meet with Colt and offer a few suggestions in the revolver’s construction. The meeting clearly went well: in early January 1847,

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<sup>23</sup> Francis Markoe, Corresponding Secretary of the National Institute, to Samuel Colt, August 22, 1840, Colt CHS, Box 2.

<sup>24</sup> As proven by the model he submitted to the military in 1846. It included a larger caliber and a simplified trigger mechanism than the Paterson arms.

<sup>25</sup> Samuel Colt to Christopher Colt, January 18, 1846, Colt CHS, Box 6.

<sup>26</sup> Houze, *Samuel Colt*, 68.

Colt agreed to supply the War Department with 1,000 revolvers at twenty-five dollars apiece “to be delivered within six months...and as much earlier [as possible].”<sup>27</sup> With no arms company, no factory, and barely a single working model, however, Colt scrambled to meet the contract’s obligations. He employed numerous arms makers throughout the northeast to make various parts of the weapon and contracted with Eli Whitney, Jr., to piece together and finish the weapons at Whitney’s factory in New Haven, Connecticut.<sup>28</sup> Miraculously, Colt completed the order by July and wrote William M. Marcey, Secretary of War, announcing he could produce another 1,000 in half the time.<sup>29</sup> With the conflict with Mexico still ongoing and the need for weapons consequently still great, Marcey placed the order.<sup>30</sup>

Following this second order, Colt’s confidence grew, as did his profits, and he began work towards opening a factory of his own. In July 1847, he announced plans of an “armory to make four to five thousand a year” in a letter to Colonel George Talcott, Chief of Ordnance. Colt assured Talcott, pledging “I shall thereafter [sic] be in better condition to supply orders on short notice.”<sup>31</sup> While he considered locating the factory in St. Louis or New York City, he ultimately choose his hometown of Hartford, Connecticut, for the base of his operations.<sup>32</sup> With the profits from the government contracts and a sizable loan from his older cousin, Elisha, Colt rented out a building on Pearl Street near downtown Hartford in August of 1847.<sup>33</sup> He brought the patterns,

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<sup>27</sup> See Samuel Colt to Capt. Samuel H. Walker, December 3, 1845, Colt CHS, Box 6, and Samuel Colt and Capt. Samuel H. Walker, Memorandum of Agreement, January 4, 1847, Colt CHS, Box 6.

<sup>28</sup> William B. Edwards, *The Story of Colt’s Revolver; the Biography of Col. Samuel Colt*, (New York: Castle Books, 1957), 223-226.

<sup>29</sup> Samuel Colt to William Marcey, New Haven, July 6, 1847, Colt CHS, Box 6.

<sup>30</sup> Second order noted in Petition of Samuel Colt, “Praying a contract for supplying the government with an additional number of his repeating fire-arms,” December 12, 1848, reprinted in Charles T. Haven and Frank A. Belden, *A History of the Colt Revolver, and the Other Arms Made by Colt’s Patent Fire Arms Manufacturing Company from 1836 to 1940*, (New York: W. Morrow & Company, 1940), 297.

<sup>31</sup> Samuel Colt to Col. George Talcott, Ordnance Department, New Haven, July 29, 1847, Colt CLS, Box 55, Folder 1.

<sup>32</sup> He asked his brother, James, who was living in St. Louis at the time, about labor costs and James’ willingness to work at the factory. Samuel Colt to James Colt, June 17, 1847, Colt CLS, Box 6, Folder 3.

<sup>33</sup> See correspondence between Colt and landlord, E. E. Marcy, between July and August, Colt CLS, Box 8.

tools, and dies used at Whitney's New Haven factory and purchased additional machinery from Ames Manufacturing Company, located just up the Connecticut River in Chicopee, Massachusetts.<sup>34</sup> Shortly thereafter, the factory was up and running. By September, according to the *Hartford Daily Times*, the factory employed thirty workers using "ingenious machinery, which turns, and cuts and drills, to the greatest perfection."<sup>35</sup>

The beginning of production on Pearl Street marked a new stage in Colt's career, characterized by a new focus on mechanization and mass-production. With the Patent Arms Manufacturing Company, Colt had been beholden to a board of directors and travelled incessantly. While he had some success in introducing his guns to the U.S. forces during the Second Seminole War in Florida, the Paterson models were bulky and far too expensive for large sales to either the government or the public. By the time Colt established his own factory, nearly a decade later, he had developed a more efficient arm that could be produced at a lower price. By this point, Colt had also secured dozens of positive testimonials from U.S. Army and Navy officials, including Major General Zachary Taylor, which increased the popularity for his weapon with the public as well as the military.<sup>36</sup> For the first time in his life, Colt was able to devote his time to further simplifying his weapons' design and mechanizing the production process. For help with the later goal, Colt brought on Elisha K. Root as superintendent of his operations in 1848, offering Root the highest compensation ever paid a New England mechanic.<sup>37</sup> Root was a renowned mechanic who worked at Colt's factory until his death in

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<sup>34</sup> Hosley, *American Legend*, 24.

<sup>35</sup> *Hartford Daily Times*, September 29, 1847, quoted in Hosley, *American Legend*, 24.

<sup>36</sup> For Zachary Taylor's testimonials and others, see them reprinted in the *Congressional Globe*, Senate, 30<sup>th</sup> Congress, 2<sup>nd</sup> Session, March 1, 634, accessed April 5, 2017, <https://memory.loc.gov/cgi-bin/ampage>.

<sup>37</sup> Tucker, *Industrializing*, 75.

1865, introducing and inventing the most technologically sophisticated machinery of the day to mass-produce Colt firearms.

Born in Belchertown, Massachusetts in 1808, Elisha Root had worked in a textile factory for ten months out of the year in his youth. At the age of fifteen he began an apprenticeship at a machine-shop in Ware. He then travelled around the Connecticut Valley as a journeyman machinist, supervising and repairing the machinery of the textile factories that were popping up across the region.<sup>38</sup> In 1832, he was hired at the Collins Company in Canton, Connecticut, which specialized in axe-making, as well as other edge tools. Samuel W. Collins, the president of the company, recognized Root's gifts early on. Within two years he promoted Root to overseer of the repair shop, where he earned nearly double the other skilled workmen.<sup>39</sup> At the time, axes were largely made by hand. There was a sophisticated division of labor in which a number of skilled blacksmiths and craftsmen specialized in their respective piece of work. Virtually no machinery was used. During Root's tenure at Collins Company, that would change, as Collins would encourage Root and his fellow mechanic David Hinman to introduce machinery into axe-production.<sup>40</sup>

Between 1834 and 1845, the invention of one machine created a chain reaction of innovation that resulted in the mass-production of axes and one of the first modern machine-based factories in the world. In 1834 Hinman created a die-forging machine that produced twenty-five times more axe heads than the traditional method. The surplus of heads created a bottleneck as craftsmen could not punch holes in the heads fast enough to keep up with production. To solve the problem, Root patented an eye-punching machine, which reduced the

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<sup>38</sup> Barnard, *Armsmear*, 258.

<sup>39</sup> Donald R. Hoke, *Ingenious Yankees: The Rise of the American System of Manufacturers in the Private Sector*, (New York: Columbia University Press, 1990), 105.

<sup>40</sup> Hoke, *Ingenious Yankees*, 105.

steps of punching the eye in the head of the axe from four to one. That in turn created a bottleneck in the grinding department. Root responded by inventing a machine that shaved axes instead of grinding them. Along with these three inventions, Root created numerous smaller machines to further mechanize production. By 1845, the Collins Company had the capacity to produce 1,000 axes per day, far more than ten it had years earlier.<sup>41</sup> A writer for the *Scientific American* toured the three-story factory shortly after Root left Collins and described “sixteen very curious and ingenious machines... invented by Mr. Root” on the bottom floor alone.<sup>42</sup>

In many ways, Root’s process of innovation resembled the mechanization of the textile industry that sparked the industrial revolution in the late-eighteenth century. Just as the use of machines to spin cotton created a bottleneck in weaving and thus invited the invention of weaving machinery, the development of one machine in axe-making created a bottleneck that in turn demanded a new innovation. Through his experience at Collins, Root witnessed and participated in creating the processes and innovations that mechanized an industry. Even more crucially, he developed the vision to appreciate this dynamic and see a machine not as an isolated object but an integral part of a larger system.

This vision, and the mechanical skill to implement it, explains why Colt saw Root as so crucial to his own business venture, and why he offered Root such a remarkable salary in 1848. Colt had realized the importance of such ideas through his years in the mid-1840s working alongside scientists and inventors at New York University and his experiences with both his Paterson company and work with Whitney during the Mexican-American War. By hiring Root, he could finally turn these ideas into reality. Within two years of Root’s arrival, Colt would rely

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<sup>41</sup> Hoke, *Ingenious Yankees*, 109-116.

<sup>42</sup> “Our Visit to the Collinsville Ax Works,” *Scientific American*, (Jul 16, 1859), Vol. 1, No. 3, 36-37. P 36. While this article was based on a visit in 1859, the factory and equipment changed little since 1847, as documented by Hoke, *Ingenious Yankees*, 61.

on machinery for nearly ninety percent of the production of his revolvers.<sup>43</sup> The extensive mechanization Colt and Root built into Colt's Hartford factory not only allowed them to increase production while lowering cost, but also attracted international attention and solidified Colt's image as a forward-looking industrialist. The machinery it contained represented the pinnacle of a new stage of the industrial revolution as mechanization spread from textiles to more complex products. The revolvers that poured forth by the hundreds and thousands were one of the first mass-produced metal-fabricated consumer products in history. Their spread around the world in the 1850s, in turn, marked a transitional moment in U.S. international history, a moment at which the United States began to be recognized as a technological leader on the world stage.<sup>44</sup>

#### Marvelous Extension: Colt's International Business in 1849<sup>45</sup>

In the summer of 1849, Colt embarked on his first overseas business trip as a successful firearms producer. U.S. government orders had decreased following the end of the Mexican-American War in early 1848, so Colt looked beyond the United States, hoping to penetrate foreign markets. Armed with abundant military testimonials and a substantial record of sales, Colt travelled through France and the Austrian Empire to Constantinople before returning to Hartford in late 1849. During this five-month journey, Colt achieved some minor success and learned a significant lesson that would help him secure more foreign business in the 1850s.

The first major deal Colt made abroad was with the Austrian government in mid-1849. The Habsburgs were still struggling to put down the Hungarian revolt that had broken out amidst

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<sup>43</sup> Tucker, *Industrializing*, 75.

<sup>44</sup> Paul Uselding, "Elisha K. Root, Forging, and the 'American System,'" *Technology and Culture*, vol. 15, no. 4 (1974): 563-567.

<sup>45</sup> "A Day at the Armory of Colt's Patent Fire Arms Manufacturing Company, Hartford, Connecticut," *United States Magazine*, New York, Vol. IV, Iss. 3, (March 1857), in Colt CSL, Box 66, Folder 2.



the wave of revolutions that swept Europe in the spring of 1848. Colt's revolving pistols had been relatively unknown in Europe at the time, but Austrians quickly jumped at the chance to increase their military advantage. In the agreement, Colt authorized the Austrian government to manufacture revolvers based on his patent for a five-year period. Although the new weapon probably made little difference in the outcome of the revolt, as the Hungarians were defeated shortly after the deal was struck, the Austrian government nevertheless went on to produce slightly more than one thousand revolvers before the agreement expired.<sup>46</sup>

The Austrian deal not only represents Colt's first major international business transaction; it also illustrates how Colt would consistently put business before personal sympathies, both at home and abroad. Despite selling arms to the Austrian government, Colt would publicly support the Hungarian rebels in two key episodes over the following three years. The first came in the immediate aftermath of the rebellion, just months after he signed the deal with the Austrian government. Indeed, Colt was not the only American to sympathize with the revolutionaries.

The European revolutions of 1848, and the Hungarian revolution in particular, were followed closely by the American press. While Hungary only existed as an independent state for a few months in 1849, the revolution galvanized an American public who saw their republican example spreading across the Atlantic.<sup>47</sup> Secretary of State Daniel Webster, for one, announced he would "rejoice to see our American model upon the lower Danube and on the mountains of Hungary."<sup>48</sup> American hopes were dashed, though, as one by one the European revolutions were

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<sup>46</sup> Samuel Colt to Elisha Colt, 12 June 1869, Colt CSL, Box 8.

<sup>47</sup> Described in Timothy Mason Roberts, *Distant Revolutions: 1848 and the Challenge to American Exceptionalism*, (Charlottesville: University of Virginia Press, 2009), 42-63.

<sup>48</sup> Webster quoted in George C. Herring, *From Colony to Superpower: U.S. Foreign Relations Since 1776*, (New York: Oxford University Press, 2008), 216.

crushed. In Hungary, republican forces were defeated at Vilagos in August 1849. The remaining Hungarian leadership fled along with the president of the short-lived Hungarian Republic, Louis Kossuth, to the Ottoman Empire, where they were granted asylum. As the Austrian Empire demanded their extradition, many Americans voiced public support for the exiled rebels.<sup>49</sup>

Colt was one of them. He had watched the events of 1849 unfold while stopping in Paris on his business trip. In September 1849, he and fourteen other Americans in Paris sent a petition to Dabney S. Carr, the American minister to the Sublime Port of Constantinople, urging him to voice support for Kossuth. Like Americans back home, Colt and his fellow travelers interpreted the Hungarian revolution through the lens of their own national experience. “The chief of the proposed victims has emulated the example of our Washington by his deeds and character,” the petition argued. “His companions in counsel and in arms are made by their sacrifices worthy of a place by the side of the heroes of your own revolution.”<sup>50</sup> Not surprisingly, the petition conveniently omitted the arms Colt allowed the Austrian government to construct just months before the document was signed.

In a second sign of support, Colt subsequently gifted Kossuth a pair of revolvers following the Hungarian revolutionary’s journey to the United States in early 1852. At the time, Colt was in Great Britain working towards the establishment of his London factory, but he instructed a committee of his workmen to greet Kossuth and present him the revolvers if he traveled through Hartford.<sup>51</sup> In preparing this reception, Colt showed symptoms of the Kossuth fever that swept the United States. Hungarian dishes and “Kossuth caps” were all the craze in the

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<sup>49</sup> Istvan Deak, *Lawful Revolution: Louis Kossuth and the Hungarians, 1848-49*, (New York, Columbia University Press, 1979).

<sup>50</sup> W.M. Corey, G.N. Landers, and S. Colt to Dabney S. Carr, 22 September 1849, Colt CHS, Box 6.

<sup>51</sup> As Colt explained in his letter to Kossuth, Col. Colt to Kossuth, London, 20 March 1853, Colt CSL, Box 6, Folder 6.

early months of 1852, and Colt clearly hoped to gain some good publicity by hosting the Hungarian celebrity.<sup>52</sup> Ultimately, Kossuth never made it to Hartford, so Colt mailed him the revolvers in March of 1853. Always the zealous businessman, Colt made sure to mention his new London factory in a letter accompanying the gift. “While it would have been the greatest satisfaction of me to have shown you my manufactory of fire-arms in Hartford,” Colt explained, “it will not be less so to have you and any of your friends examine my smaller establishment, just started, at Thames Bank, Pimlico, London, at any time it is your pleasure.”<sup>53</sup> In reply, Kossuth thanked Colt for his “valuable sympathy” and also “for your inviting me to your London establishment.” He then promised to “avail myself of it at the earliest opportunity.”<sup>54</sup> While it is unknown whether Kossuth ever visited the factory, Colt clearly appreciated the interchange as he kept copies of the letters in a special folder of foreign correspondence in his home at Hartford.

It is difficult to gauge how Colt justified his incongruous support for Kossuth and the Hungarian Revolution while simultaneously selling arms to the Austro-Hungarian Empire. Perhaps he was not aware of the republican nature of the Hungarian cause when he signed the deal with the Austrian Empire, or maybe he knew his guns could not be produced in time to make a difference. Perhaps he simply put profit above principle? Colt himself never explained the decision. But regardless of his interpretation, his actions exemplify a contradictory side effect of the United States’ growing presence abroad—one that continues to be seen in the world today. As Americans continue to applaud the spread of democracy abroad, enemies of democracy often carry weapons made in the United States. That same contradiction characterized Colt’s dealings—business and personal—with the world during the mid-nineteenth century.

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<sup>52</sup> Roberts, *Distant Revolutions* for “Kossuth cap,” 45.

<sup>53</sup> Col. Colt to Kossuth, London, 20 March 1853, Colt CSL, Box 6, Folder 6

<sup>54</sup> Kossuth to Colt, London, 27 March 1853, Colt CSL, Box 9, Folder 7.

The Austro-Hungarian Empire was not the only region Colt became involved with in 1849. After striking his deal with the Austrian government, Colt proceeded to Constantinople with the Connecticut shipping merchant George Landers, in the hopes of selling his arms to the Ottoman Empire.<sup>55</sup> Although American missionaries had begun arriving in the region in the 1820s, American businessmen had not been particularly drawn to the region until the 1840s and 1850s, when the young Sultan Abdul Mejid (1839-61) broadened his father's modernizing efforts. While inventors and entrepreneurs from many industrializing countries poured into the Ottoman Empire during this period, Americans often enjoyed preferential treatment over their European counterparts. This was because the Sultan saw the United States as a somewhat neutral power that could be exploited or manipulated to counter European political machinations.<sup>56</sup>

In traveling to Istanbul, Colt followed a stream of American businessmen, including his fellow inventor and one-time business partner Samuel Morse, who organized an exhibition of his telegraph system for the Sultan in August of 1847.<sup>57</sup> Colt was ultimately successful in striking a deal here as well, though not in the scale at which he had hoped. In the end, the Sultan only agreed to purchase 200 revolvers.<sup>58</sup> Though at a smaller scale than Colt desired, this nevertheless marked the first major direct foreign order of his weapons. More importantly, Colt was able to maintain many of the connections he established during this trip. These connections enabled him to sell more firearms to the Ottomans following the outbreak of the Crimean War in 1853. Colt also benefited personally from these connections. In addition to the cash payment he made for the 200 revolvers, the Sultan also gave Colt an ornate gold snuffbox studded with diamonds.

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<sup>55</sup> George Law to Samuel Colt, 28 November 1849, Colt CHS, Box 6.

<sup>56</sup> As outlined in Yakup Bektas, "Displaying the American Genius: The Electromagnetic Telegraph in the Wider World." *The British Journal for the History of Science* 34, no. 2 (2001): 213.

<sup>57</sup> Bektas, "American Genius," 214.

<sup>58</sup> S. Colt to George Law, March 22, 1853, cited in Houze, *Samuel Colt*, 195.

This luxurious gift was the first of many presents Colt would receive from foreign dignitaries as Colt expanded the international scope of his business in the 1850s.

### Colonel Colt in Europe: the 1850s

After several months abroad, Colt returned to Hartford in 1849, where he began production of his pocket revolver, a smaller version of the Walker revolver that ultimately became the most widely selling pistol of his lifetime.<sup>59</sup> He also continued to pour the revenues he had made during the Mexican-American War into expanding his operations. By 1851, the new machinery and organizational layout that Root had begun designing in late 1848 was beginning to bear fruit. By then Colt's armory employed nearly three hundred workers and produced forty thousand revolvers a year, an unprecedented number for a private producer.<sup>60</sup>

Having achieved this greater financial and personal prestige, Colt set out to fix a problem he found while traveling through Europe. Although he had been allowed to meet with the Sultan of the Ottoman Empire, most European dignitaries and high officials were less willing to grant an audience to a common citizen. To resolve this issue in future trips, Colt sought a military title from the Connecticut Governor and fellow Democrat Thomas H. Seymour. His ploy worked. On 2 May 1850, Seymour named Colt a lieutenant colonel and aide-de-camp in the Connecticut state militia.<sup>61</sup> Without ever serving in the military or firing a single shot in battle, Colt captured a prized title. As his correspondence reflects, he immediately began to sign his letters "Colonel Colt."<sup>62</sup> He also had new barrel inscription dies made that read: ADDRESS COL. SAML COLT. Colt received the new title just in time for his next major foray on the international stage, as

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<sup>59</sup> Hosley estimates there were over 325,000 sold by the time of Colt's death in 1862. Hosley, *American Legend*, 25.

<sup>60</sup> Tucker, *Industrializing*, 70.

<sup>61</sup> Houze, *Samuel Colt*, 79.

<sup>62</sup> See incoming correspondence in Colt CSL, Box 1.

news of the first ever International Exhibition washed onto American shores and beckoned American agriculturists, inventors, and entrepreneurs to show off their wares on the world stage.

As discussed in the previous chapter, Colt capitalized on the attention he drew at the Crystal Palace Exhibition of 1851 to secure sales of his revolvers from individual British soldiers, speak at the prestigious British Institute of Civil Engineers, and set up a factory on the banks of the Thames. During his stay in London, Colt rubbed shoulders with a cohort of American inventors, artists, and entrepreneurs, many of whom began to perceive new opportunities for Americans abroad in the 1850s. It was in this milieu, characterized by a growing appreciation of American technology on the world stage, that Colt developed the confidence and vision to establish the United States' first multinational business and further expand his foreign sales in Europe and beyond.

When the prominent London based American banker George Peabody hosted a grand farewell banquet at the close of the Exhibition, Colt joined other American luminaries like the U.S. Commissioner of the Exhibition Edward Riddle, the American dentist of Paris Dr. Brewster, and the noted lock maker Alfred C. Hobbs. The guests celebrated at the London Coffee House at Ludgate Hill from the early evening until after one o'clock in the morning, drinking toast after toast and applauding the "friendly union between Great Britain and the United States." At the close of the evening, Peabody raised one last glass to his fellow Americans to "pay a parting tribute to their skill, ingenuity, and originality."<sup>63</sup> Evenings like this, and the overall experience of the Exhibition as a whole, heightened Colt's and his fellow Americans' sense that the world was simply waiting for them to arrive.

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<sup>63</sup> Information on the dinner and Peabody's final toast, quoted in Charles T. Rodgers, *American Superiority at the World's Fair. Designed to Accompany a Chromo-Lithographic Picture, Illustrative of the Prizes awarded to American Citizens, at the Great Exhibition*, (Philadelphia: John J. Hawkins, 1852), 132, accessed February 2, 2017, <https://archive.org/stream/americansuperior00rodg#page/n5/mode/2up>.

Hiram Powers, the only American artist to achieve notable recognition at the Crystal Palace with his marble statue *The Greek Slave*, outlined this new perception in a letter written to Colt shortly after the close of the Exhibition. “Our experience has been somewhat similar,” Powers related to Colt, noting that “Both of us have had some tough times in our day.” He then reminisced about attending one of Colt’s nitrous oxide gas exhibitions in Cincinnati, when Colt, “frog-like, leaped between the ropes” to avoid a “huge blacksmith” trying to grab the young exhibitor. “I remember you telling me in Washington,” Powers continued, “that at that very time you were elaborating in your mind the great invention you have since given to the world.” Despite these challenges, the two Americans had “passed through a variety of trying processes upward to some distinction.” Like themselves, Powers continued, the United States was achieving distinction as well. In his final remark, Powers proudly announced, “Jonathan is indeed taking a stand among the nations of the ‘arth [sic].”<sup>64</sup> By using the common British moniker for the United States—“Jonathan”—Powers laid claim to the transatlantic nickname and celebrated the nation’s growing international reputation.

Colt clearly shared Powers’ confidence that the time was ripe for Americans to expand their presence overseas. By the summer of 1852, just a few months after the closing of the Crystal Palace Exposition, Colt was shipping machinery to London to set up the factory on the banks of the Thames.<sup>65</sup> The factory became a showpiece of American technology and was visited and praised by the most prominent British engineers of the time as well as British nobility and celebrities. And the timing could not have been more auspicious. Just ten months after he began production in London, the Crimean War broke out in Europe.<sup>66</sup>

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<sup>64</sup> Hiram Powers to S. Colt, September 10, 1851, Colt CSL, Box 8, Folder 14.

<sup>65</sup> Samuel Colt to Edward Dickerson, September 10, 1852, Colt CSL, Box 6, Folder 5. In this letter, Colt enquired if the machinery shipped in late July arrived safely.

<sup>66</sup> This factory is discussed in more detail in Chapter 2.

What initially began as a local conflict in the Holy Land between French Catholic and Russian Orthodox priests over control of ritual sites had by October of 1853 erupted into the first major European conflict since the Napoleonic Wars. As Russia attempted to extend its control of the Balkans and gain access to the Mediterranean at the expense of the Ottoman Empire, which was widely perceived as the “sick man of Europe,” France and Great Britain united to prop up the Ottomans in order to preserve their own influence in the region. While the conflict only lasted two-and-a-half years and was largely confined to the Crimean peninsula, it cost both sides tens of thousands of soldiers and generated an enormous market for firearms, as none of the belligerents were adequately prepared.<sup>67</sup> As he had with the Mexican-American War of the 1840s, Colt jumped at the opportunity to benefit from the conflict. Already positioned in Europe with a factory in London and a military title, Colt would use the opportunity to sell weapons to both sides of the conflict and build his growing international reputation. During the war, which lasted from 1853 to 1856, Colt travelled widely through Europe. He also sent numerous business agents abroad from his European base in London. By the end of the conflict, he had established business interests in Great Britain, France, Belgium, and Russia, though some were more successful than others.

Colt’s London factory, as well as his regular appearance in the British press following the Crystal Palace, left him uniquely positioned to offer the British government weapons. As the last chapter discussed, it was the shortage of weapons resulting from the Crimean War that initially brought British army engineers and ultimately Parliament to investigate American firearms manufacturing methods. Colt worked to capitalize on this attention, advertising in British

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<sup>67</sup> Literature on the Crimean War is voluminous. For an introduction, see Alexis S. Troubetzkoy, *A Brief History of the Crimean War*, (London: Constable & Robinson, 2006).



newspapers and appealing to the British military for orders.<sup>68</sup> By the time the war ended in March 1856, Colt had produced nearly thirty-thousand arms for the British government and sold hundreds more to private British military officials and recruits.<sup>69</sup>

Across the channel, Colt also tried to interest the French government in his firearms during the Crimean War. In his customary manner, he sent a cased set of ostentatiously inlaid revolvers to Louis Napoleon Bonaparte, later to become Napoleon III, but no further business came of this gift.<sup>70</sup> Although Colt displayed his arms at France's first World's Fair—the *Exposition Universelle*, held in Paris in 1855—they did not attract the same fanfare as he had at the Crystal Palace. In part, this was because France was swept with an anti-American wave during the 1850s as many French intellectuals retracted in horror at the growing commercialization of American democracy.

It was in this context that the term “Americanization” first took on a new meaning. In the 1840s, the term began to be used to describe the acculturation of immigrants who moved to the United States. But in 1855 in the wake of the *Exposition Universelle*, the French poet Charles Baudelaire used the term to describe another phenomenon. Although a fan of Edgard Allan Poe and other facets of American literature, Baudelaire complained of the growing mechanization of American society that was on prominent display at the Paris Exposition. “The poor man is so Americanized by the zoocratic industrial philosophers,” Baudelaire lamented upon observing his compatriots at the Exposition, “that he has lost all notion of the difference between the

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<sup>68</sup> Advertisement reprinted in Charles T. Haven and Frank A. Belden, *A History of the Colt Revolver and the Other Arms Made by Colt's Patent Fire Arms Manufacturing Company from 1836-1940* (New York: Bonanza Books, 1940), 343.

<sup>69</sup> Joseph G. Rosa, *Colonel Colt, London: The History of Colt's London Firearms, 1851-1857*, (London: Arms & Armour Press, 1976), 100.

<sup>70</sup> Houze, *Samuel Colt*, 184.

phenomena of the physical and moral worlds.”<sup>71</sup> This complaint highlights the growing presence of American industrialists like Colt in Europe in the 1850s, and the uneasiness many Europeans felt as a result. It also represents a growing awareness among Europeans that American influence was no longer confined to the borders of the United States, but was spreading to even “Americanize” Europeans in their own nations. The new meaning Baudelaire imbued the term with would come to overshadow the original meaning of the term as European cries of “Americanization” reached a fever pitch at the turn of the twentieth century.

A French official report to the Crystal Palace exhibition, published three years after Baudelaire critiqued American “industrial philosophers,” more directly lampooned American culture vis-à-vis the firearms that Colt produced. The report, titled “The Manufacture of Revolvers,” noted the birthplace of the industry was the state of Connecticut and highlighted the extensive use of revolvers in the invasions of Texas and Mexico. The report then went on to criticize their wide usage by aggressive Americans both at home and abroad. “Since then they have been abused by all,” the report charged. “Filibusters, travelers, and friends of violence carry revolvers with them; under the slightest pretext they kill each other with an incredible fury.”<sup>72</sup> Indeed William Walker, the most notorious filibuster of the 1850s, was known to carry a pair of Colt revolvers.<sup>73</sup> With a wave of anti-Americanism and the violent reputation of the revolver it is not surprising Colt found little business in France, though he would have more luck across the border in Belgium.

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<sup>71</sup> Baudelaire, quoted in Mel van Elteren, *Americanism and Americanization; A Critical History of Domestic and Global Influence*, (Jefferson, N.C.: McFarland & Company, 2006), 15.

<sup>72</sup> Official French report first published in 1858, quoted in Houze, *Samuel Colt*, 185.

<sup>73</sup> See, for example, the *Hartford Daily Times* of August 10, 1858, which mentions Walker and his “band” carrying Colt revolvers, quoted in Houze, *Samuel Colt*, 74.

While on his first major business trip abroad in 1849, Colt took out a patent in Belgium. In order to comply with Belgian patent laws, which required the patentee to begin production within two years of the issuance of the patent, Colt allowed a small number of samples of his revolvers to be produced in Liège, the largest arms-making city in Europe during the period. Soon thereafter Colt hired Monsieur Devos-Sera to act as his agent in Liège to oversee the licensed manufacture of his firearms.<sup>74</sup> It was only after his London factory was up and running in January of 1853 that Colt could again turn his attention to Liège. In the preceding four years, numerous gunmakers had produced small numbers of counterfeit Colt revolvers.<sup>75</sup> While most were marked with the gunmaker's name, some were even fraudulently marked with Colt's name. In response, Colt fired off a letter A.W. Spies & Company, one of his agents in New York in February of 1853. "I have seen samples of my arms that are infringements upon my Patents they are sed [sic] to have been made in Liege [sic] & are the most infurnal [sic] productions I ever have looked at," Colt complained. "Under no circumstances shall I permit such arms to be sold."<sup>76</sup> His attorney, Edward N. Dickerson, sent similar warnings to gun merchants in Boston and Philadelphia. After demanding his own distributors stop carrying them, he then had Dickerson prepare an announcement that was published in the *New York Daily Times* later in the month warning both arms dealers and the public of spurious Colt imitations imported from Europe.<sup>77</sup>

Ultimately, Colt decided to negotiate rather than litigate. He replaced his Belgian agent, Devos-Sera, and instructed his new agent John Sainthill to begin discussions with the Liège

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<sup>74</sup> William E. Newton to Samuel Colt, September 24, 1851, Colt CSL, Box 8, Folder 14.

<sup>75</sup> It is unknown exactly how many counterfeits were produced in Liège during this period, but most experts agree it was a few hundred, which amounted to only a fraction of a percentage of Colt's firearms circulating during the period.

<sup>76</sup> Samuel Colt to A.W. Spies & Co., February 1, 1853, Colt CSL, Box 6, Folder 6.

<sup>77</sup> *New York Daily Times*, "Colt's Pistols—Notice!" 15 February, 1853,7, quoted in Houze, *Samuel Colt*, 123.

gunmakers.<sup>78</sup> By April 1853 they struck a deal in which Colt supplied specific makers with partially finished revolver components, probably from the London factory, where production was already beginning to outstrip demand. He also agreed to supply machines and tooling necessary to produce authentic Colt revolvers. The importation of these machines marked the second country outside the United States where American machinery began to replace hand labor. In a letter to his brother, James, sent from Liège on April 21, 1853, Colt proudly announced, “I have been here for several days past, endeavoring to effect [sic] a revolution in the system of fabricating my arms.”<sup>79</sup> After personally overseeing the importation of his machinery, Colt returned to London with a contract for a ten-franc royalty payment on all Colt’s manufactured in Liège. By September, Sainthill reported to Colt’s London agent that “the workmanship of these Pistols has greatly improved and some are really very creditable to their Makers.”<sup>80</sup>

Colt’s business dealings in Belgium represent yet another model of international sales. While he negotiated directly with the Austrian government and the Sultan of the Ottoman Empire in 1849, in London he opted to set up a factory and offer weapons to any buyers, whether public or private. Ultimately, he took orders from both, though British government contracts far outweighed private sales. In Belgium, Colt negotiated not with the state but with private firearms producers. Like in Austria, he licensed producers to manufacture his weapons, though in Belgium the licensing was accompanied by an importation of machinery. As these various models illustrate, Colt adapted to the different conditions of different nations as he expanded his business into new markets. This flexibility was key to his success in the 1850s. As his weapons

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<sup>78</sup> Samuel Colt to John Sainthill, March 8, 1853, Colt CSL, Box 6, Folder 6.

<sup>79</sup> Samuel Colt to James Colt, April 21, 1853, Colt CSL, Box 6, Folder 6.

<sup>80</sup> John Sainthill to Charles F. Dennett, September 9, 1853, Colt CSL, Box 9, Folder 7.

spread through Europe and British soldiers took them by the thousands to the battlefields of Crimea, another combatant showed interest in the American revolver.

At the height of the Crimean War in the winter of 1854, Colt and his lawyer Edward Dickerson traveled to Russia to try to secure orders. There is no doubt by that time the Russian military knew Colt was supplying the British army with revolvers. Indeed, they had probably encountered a few Colts already. After meeting with top officials of the Russian army, Colt and Dickerson were granted a private audience with Czar Nicholas I on November 11 at the Winter Palace in Gatchina.<sup>81</sup> The Czar was so impressed with the firearms he ordered 5,000 Belt Pistols immediately and began negotiations for further orders. As with the Hungarian uprising of 1849, Colt once again found himself supporting both sides of a conflict. But unlike his short-lived deal with the Austrian government, this first encounter with Russia cemented a warm and significant relationship that Colt would build upon through the 1850s.

Colt took two more trips to Russia in the 1850s, one for pleasure and the other business. In the summer of 1856 Colt and his wife Elizabeth attended the coronation of Alexander II while honeymooning through Europe. They received the invitation with the help of Colt's old ally and former governor of Connecticut, Thomas Seymour, who awarded Colt the title of Colonel six years earlier. Seymour was serving as U.S. minister to Russia and secured Colt a temporary appointment at the embassy in St. Petersburg, thus assuring his invitation to the coronation.<sup>82</sup> Colt later received a medal struck by the Russian government to mark the occasion, which he displayed along with his other foreign gifts in his home in Hartford. On his third trip to Russia in late summer 1858, Colt presented engraved arms to Czar Alexander II and his two brothers, the Grand Dukes Constantine Nikolayevich, Mikhail and Nikolay Nikolayevich. In return, the Czar

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<sup>81</sup> Houze, *Samuel Colt*, 191.

<sup>82</sup> Hosley, *American Legend*, 61.

gave Colt an ornate gold and diamond-studded snuffbox. During this visit the Russian government ordered gun-making machinery manufactured at Colt's Hartford factory to stock the Russian armories in Izhevsk, Sestrortsk, and Tula.<sup>83</sup> These orders mark the third nation that imported Colt's machinery.

Shortly after Colt concluded his agreement with the Russian government, a new European market for his arms emerged as fighting broke out on the Italian peninsula. The Kingdom of Sardinia, then led by the House of Savoy, unsuccessfully attempted to oust the Austrian Empire from the northern Italian peninsula in 1848 and 1849. The Kingdom of Sardinia was not strong enough to defeat the Austrians alone, but they gained a crucial ally in 1858 when Napoleon III secretly agreed to lend French support to Italian unification efforts. With their new French allies, the Sardinian army, led by Victor Emmanuel II, began military operations against the Austrians in May of 1859.<sup>84</sup>

After war broke out, Colt sold approximately 450 arms to the Sardinians through his London agent, Charles F. Dennett.<sup>85</sup> Although Colt had closed his London factory in early 1857, he maintained a sales office in London throughout the 1850s to better keep abreast of news in Europe, a tactic that paid off following the outbreak of the Italian conflict. These initial sales prompted the Italian Committee of New York to send a delegation to Colt's armory and ultimately led to one of the largest foreign orders of Colt revolvers in the 1850s. The delegation, led by Giovanelli Albinola, reached Hartford on December 4, 1859. Although few records survive describing the encounter, Colt went on to donate one hundred firearms to the Italian

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<sup>83</sup> Houze, *Samuel Colt*, 191.

<sup>84</sup> For the Second War of Italian Unification, see Frederick C. Schneid, *The Second War of Italian Unification 1859-61*, (Oxford: Osprey Publishing, 2012).

<sup>85</sup> Invoices reproduced by Enrico G. Arrigoni in *Le Colt di Garibaldi*, (Milan: Il Grifo, 2000), 98-113.

cause, probably with the hopes that more orders would follow.<sup>86</sup> Indeed, Colt was following a long tradition of giving away his arms in the hopes of securing future business. While many of these foreign gifts would not pay off directly, this one did.

In January 1860 the Italian nationalist and military leader Giuseppe Garibaldi, whose redshirts of the south allied with the Kingdom of Sardinia in the north in the hopes of uniting Italy, personally wrote Colt thanking him for the donated arms. The letter embodied the transatlantic identities European liberals forged in the mid-nineteenth century. “As an adopted citizen of the grand Republic,” Garibaldi opened, “I thankfully, in the name of my country, accept your sympathetic and generous gift.” Like Kossuth before him, Garibaldi emphasized not only the physical but the moral support the weapons represented. “The arrival of your arms will be hailed among us, not merely as material aid,” Garibaldi declared, “but as a subsidy of moral potency from the great American nation.”<sup>87</sup> A few months later, Garibaldi ordered 23,500 Colt rifled muskets for nearly \$160,000.<sup>88</sup> Garibaldi used these weapons in his celebrated march north from the island of Sicily to Naples in the summer and fall of 1860. The success of this march, and the meeting of Garibaldi and the Sardinian King Victor Emmanuel II at Teano on 26 October 1860, solidified Garibaldi’s global fame and marks one of the most important events in modern Italian history. As historian Lucy Raill has argued, the transnational networks Garibaldi traveled as he moved in exile through North and South America in the 1850s allowed him to construct a mythic identity that captured the imagination of peasants and politically oppressed groups around the world.<sup>89</sup> As his relationship with Colt illustrates, these networks served not only ideological

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<sup>86</sup> The weapons included sixty-two holster pistols, thirty-two belt pistols, four carbines, and two rifles, Bill of Lading reproduced in Arrigoni, *Le Colt di Garibaldi*, 116.

<sup>87</sup> Garibaldi to Col. Colt, Gino, January 15, 1860, quoted in Barnard, *Armsmear*, 360.

<sup>88</sup> Invoice for this order from July 30, 1860 reproduced in Arrigoni, *Le Colt di Garibaldi*, 118. \$160,000 is an estimated 2000 equivalent.

<sup>89</sup> Lucy Raill, "Travel, Migration, Exile: Garibaldi's Global Fame," *Modern Italy* 19.1 (2014): 41-52.

but material benefits as well. While the American state had virtually no role in the unification of Italy, American influence and support flowed beneath the state through transnational networks, including those that connected Colt and Garibaldi during the Second Italian War of Unification.

As Colt had done many times in the past, he gave away more guns to capitalize on newly established business connections and had a cased pair of revolvers especially made for King Victor Emmanuel II. Major William H.B. Hartley, Colt's business associate and aid, presented the weapons to the King while Hartley traveled through Europe in August of 1860.<sup>90</sup> In return, the King of Sardinia gave Colt a gold medal with the King's portrait on one side and an engraving that personally thanked "Colonel Samuel Colt" on the other.<sup>91</sup> Although there was no further correspondence between the King and Colt before Colt's death in 1862, the Italian connection would continue to bear fruit, as the government of the newly unified Italian nation-state led by Victor Emmanuel II placed numerous orders for Colt firearms beginning in the 1870s.<sup>92</sup>

#### From the Trans-Atlantic to the Western Hemisphere and Asia

Europe and the Near East were Colt's major foreign markets, but a deeper examination finds him and his guns in many other pockets of the world as well. From Amazonian travelers to U.S. military expeditions, Colt's international business ties extended beyond the well-established trans-Atlantic commercial world to Asia and Latin America, as well. In contrast to his trans-Atlantic ventures, the state would play a much more active role in his dealings with other regions, especially with Asia. There, in fact, Colt's success was intimately entwined with state-

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<sup>90</sup> Samuel Colt to William B. Hartley, July 15, 1860, Colt CSL, Box 6, Folder 13.

<sup>91</sup> Medal observed by author while visiting the Wadsworth Atheneum Museum of Art, May, 2015.

<sup>92</sup> See Colt CSL, Box 40. First order in 1872.



backed expansion in several ways. First, the foundation of Colt's business was only secured with the extension of the United States across the continent during the Mexican-American War. The territorial acquisitions that followed included about 1.2 million square miles of territory and a vast coastline on the Pacific.<sup>93</sup> With the discovery of gold in California and the promise of increased trade with Asia, many American statesmen and merchants began to call for a more active role in the Pacific. This led to the second way in which Colt's fortunes were tied to that of the state. The United States already conducted an extensive trade with China and was the first nation to secure a treaty (the Treaty of Wang-hsia in 1844) after the British forced China to open more ports following the First Opium War. Buoyed by a renewed sense of national destiny and an expanded Pacific coastline, American policymakers decided to not just follow Britain's lead but take the initiative in forcing Japan, which had been closed to all but a tiny trickle of foreigners, to open commercial intercourse with the wider world. As they had in the Mexican-American War, Colt's weapons would follow the American state's expansion.

President Millard Fillmore named Commodore Mathew Perry to head the expedition to open Japan. Perry left Virginia in November 1852 with four steam warships, three sailing sloops, and a collection of American mechanical products, including a miniature locomotive, an irrigation pump, a telegraph, and—significantly—a large number of Colt firearms.<sup>94</sup> American policymakers saw these examples of American technological prowess as tools of diplomacy that would establish respect for the United States and stimulate commercial interest.<sup>95</sup> While the

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<sup>93</sup> The importance of the state in early American industrialization, especially in the firearms industry, has recently been highlighted in Lindsay Schakenback Regele, "Industrial Manifest Destiny: American Firearms Manufacturing and Antebellum Expansion," *Business History Review*, vol. 92, Iss. 1, (Spring 2018): 57-83, and the forthcoming Lindsay Schakenbach Regele, *Manufacturing Advantage: War, the State, and the Origins of American Industry, 1776-1848*, (Baltimore: Johns Hopkins University Press, 2019).

<sup>94</sup> Herring, *From Colony*, 212. For the machinery sent, see Richard O. Cummings, "The Growth of Technical Cooperation with Governments Abroad, 1849-1853," *Pacific Historical Review*, vol. 18, No. 2, (May 1949), 211.

<sup>95</sup> Bektas makes this point in "Displaying American Genius," 404.

government sent some outdated firearms from its stocks at the New York Navy Yard, Colt's weapons were the only private arms carried to Japan. Colt's path crossed Perry's back in his submarine battery days of the mid-1840s while Perry worked closely with the Navy Ordnance department. This connection and the years of lobbying in Washington, as well as Colt's growing international reputation following his Crystal Palace exhibition, contributed to Perry's request for Colt's weapons for the Japanese mission.

In all, Perry took one hundred plain revolvers Colt sold the Navy department in the years following the Mexican-American War, as well as a number of cased presentation pieces intended for Asian dignitaries.<sup>96</sup> Perry delivered these weapons to numerous government officials as he traveled through Asia surveying coal deposits and negotiating commercial treaties. Upon his return, Perry informed Colt, "The emperor and several of the princes of Japan, the governor of Shanghai, the king of Lew Chew, and the king of Siam have received your invention through me."<sup>97</sup> Colt not only obtained a new market for his weapons, but also a new shipment of personal gifts. In return for his revolvers and presentation pieces, the Japanese sent Colt two samurai swords and two antique Dutch matchlock guns. Although Colt had some trouble getting the gifts out of customs—the government wanted duties and Colt didn't want to pay them—by 1857 the weapons had safely been delivered to his home in Hartford.<sup>98</sup> Colt received another set of gifts when Japanese diplomats toured through the United States in May of 1860. According to the *New York Times*, Colt met with the Japanese officials and presented another set of ornate

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<sup>96</sup> The exact number is unknown, but probably around eight to ten based on the number of dignitaries Perry presented revolvers to. See Perry's letter to Colt, New York, April 25, 1857, quoted in Barnard, *Armsmear*, 355.

<sup>97</sup> Perry to Colt, New York, April 25, 1857, in Barnard, *Armsmear*, 355

<sup>98</sup> These difficulties are discussed in a letter from Samuel Colt to the Hon. James Toucey, June 1, 1856, Colt CHS, Box 7.

firearms. In return, they gave him a set of three richly-decorated lacquer boxes that each contained bowls, cups, and covers, probably in honor of his marriage a few years before.<sup>99</sup>

In addition to these presents from the Japanese government, Colt also received lavish gifts from the two kings of Siam, a country governed by a unique dual monarchy at the time, in return for the arms Perry gave them while in Asia. In a letter thanking Perry for delivering the weapons, the second king of Siam, S.P. Pawareendrramesr, described them as “the most perfect thing of the kind I have ever seen.”<sup>100</sup> In return, the first king sent Colt a silver water-pot, a golden snuff-box, and a richly gilded silver cigar case. The second king gave an ornate gold and silver double vase. In a letter of thanks to Colt the second king of Siam described the gift as “a sample of the finest kind of work that is executed in Siam.”<sup>101</sup> Colt added these items to his display of foreign gifts in the music room of his home in Hartford. His wife, Elizabeth, must have particularly appreciated this Siamese double vase, as it was the only foreign gift she had included in the portrait she commissioned of her husband after his death.<sup>102</sup>

The gifts Colt exchanged with the various dignitaries of Asia did not directly result in foreign sales, but his generosity was hardly wasted. The weapons Colt offered to Asian dignitaries symbolized his commitment to expand his business overseas. They also reinforced his international reputation. His name appeared multiple times in the official report of the expedition Commodore Perry helped prepare, which was commissioned by Congress and first published in 1856.<sup>103</sup> As the report publicly confirmed, Colt was the only private arms-dealer to send weapons

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<sup>99</sup> “From Washington...Our Japanese Visitors,” *New York Times*, May 21, 1860,4. Houze describes these lacquer boxes in Houze, *Samuel Colt*, 198.

<sup>100</sup> The Second King of Siam to Commodore Perry, Bangkok, September 25, 1853, quoted in Mathew Calbraith Perry, *Narrative of the Expedition of an American Squadron to the China Seas and Japan, Performed in the Years 1852, 1853, and 1854, Under the Command of Commodore M.C. Perry, United States Navy, by Order of the Government of the United States*, (Washington, D.C.: B. Tucker, 1856), 192.

<sup>101</sup> Second King of Siam to Col. Colt, Bangkok, Siam, May 27, 1858, excerpted in Barnard, *Armsmear*, 356.

<sup>102</sup> This portrait is reprinted and described in Hosley, *Samuel Colt*, 172.

<sup>103</sup> Perry, *Narrative of the Expedition of an American Squadron*.

to Japan. The association of his name with the celebrated expedition to Japan was worth more than the most expensive advertising. Furthermore, his correspondence with the Navy Department and Commodore Perry further reinforced connections he had established with the United States military. As he had in the Mexican-American War a decade prior, Colt benefited from the expansion of the American state.

Colt's weapons flowed into Latin America in the 1850s as well. Like they did in Asia, they sometimes travelled with the American state. When Lieutenant William Lewis Herndon led a Naval expedition to explore the Amazon River in 1851 and 1852, for instance, some of his crew carried Colt revolvers.<sup>104</sup> In his official report, published by the Navy in 1853, Herndon recounted traveling a road that "had reputation for robbers." When the guide asked if Herndon and his men carried protection, his second in command, Lardner Gibbon, "replied by showing his six-barrelled [sic] Colt."<sup>105</sup> As it had in Perry's official report of the expedition to Japan, Colt's name appeared in reports of the extension of the American military in Latin America. It is probably no coincidence Colt's extensive library at his home in Hartford contained both Perry's and Herndon's works.<sup>106</sup>

Colt also conducted private sales in Latin America. According to the *Hartford Daily Times*, shortly after the Mexican-American War, Colt complained about the sluggish pace the U.S. military adopted his arms before rather brazenly boasted that "the Mexicans offered \$100 apiece... during the war." Shortly after peace was declared, Colt sent several agents to

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<sup>104</sup> On the goals and general background of Herndon's Expedition, see Bell, Whitfield J. "The Relation of Herndon and Gibbon's Exploration of the Amazon to North American Slavery, 1850-1855," *The Hispanic American Historical Review* 19, no. 4 (1939): 494-503.

<sup>105</sup> Lieutenant William Lewis Herndon, *Exploration of the Valley of the Amazon, Made Under Direction of the Navy Department, by Wm. Lewis Herndon and Lardner Gibbon, Part I*, (Washington: Robert Armstrong, Public Printer, 1853), 44.

<sup>106</sup> As seen on the Estate Inventory following Colt's death, cited in Hosley, *American Legend*, 143.

Mexico.<sup>107</sup> While it is unknown if any sales came out of this endeavor, it suggests Colt's willingness to sell arms to any nation, even recent enemies of the United States. He also sent shipments of weapons to individual arms dealers in Latin America. One American, operating out of Buenos Aires, wrote Colt in early 1853 requesting more weapons. While he urged Colt to sell them for a lower cost, he admitted he could hardly keep the revolvers on his shelves.<sup>108</sup> Colt also continued his policy of giving weapons to important figures in the hopes of drawing more sales. For example, Colt gave Francesco Serrano, the Captain-General of Cuba, two pistols while vacationing on the island in 1861, just a few weeks before his death.<sup>109</sup>

But perhaps Colt's most extensive dealings related to Latin America involved not direct sales, but rather an ambitious advertising scheme that sought to connect his name with exotic locations and a growing American presence not only in the Western Hemisphere, but indeed around the entire world. This endeavor coincided with a growing wave of interest in Latin America among American artists in the mid-nineteenth century.<sup>110</sup> Indeed, Colt might have heard of his fellow Hartford native and leading American painter Frederic Church's travels through the region in 1853. Whether or not he knew of Church, that same year, Colt began a business relationship with George Catlin, an American artist who made a name for himself painting portraits and scenes of Native American life from Florida to the recently acquired territories of the West. The two probably met at the London Crystal Palace, where Catlin exhibited Native Americans costumes next to Hiram Powers' celebrated *The Greek Slave*. The 1850s was a trying period for the itinerate artist, who found himself deeply in debt after the U.S. Congress refused to

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<sup>107</sup> Hosley, *American Legend*, 95.

<sup>108</sup> James P. Dalton to Col. Colt, March 17, 1853, New York, Colt CSL, Box 9, Folder 7.

<sup>109</sup> Serrano's thank you note is cited in Barnard, *Armsmeat*, 361.

<sup>110</sup> Katherine Emma Manthorne, *Tropical Renaissance: North American Artists Exploring Latin America, 1839-1879*, (Washington, D.C.: Smithsonian Institution Press, 1989).

purchase his Indian Gallery, which amounted to Catlin's life work up to that point. Running from creditors and determined to find a new field of adventure, Catlin planned a trip to Latin America and set sail in the summer of 1853.<sup>111</sup> Before departing, Catlin secured much needed financial support from Colt in exchange for a number of paintings depicting the use of Colt's firearms.<sup>112</sup> The arrangement was extremely innovative for the time and attested to Catlin's ingenuity in securing more funding. At the same time, the deal spoke to the vision and determination Colt had in associating his guns with the wider world.

Ultimately Catlin produced ten oil paintings for Colt in the 1850s. He delivered the first seven upon returning from his initial journey to Brazil in 1854 and three more following a second trip to Latin America in 1857. Each one depicted the artist as an intrepid explorer using a variety of Colt firearms in exotic settings. In one scene, Catlin depicts himself and a local guide hunting bright pink Brazilian flamingoes with a Colt rifle. A second scene, which Catlin titled "Catlin the Artist and Sportsmen Relieving One of His Companions from an Unpleasant Predicament During His Travels in Brazil," shows the artist unloading a Colt 1850 Navy revolver at a large group of boars that surround a downed tree where his hunting companion has taken refuge.<sup>113</sup> Catlin saves another companion in a third scene, this time from a pair of leopards. The stealthy cats crept out of the rainforest while most of Catlin's party was napping by a stream. With one foot in a canoe and the other on land, Catlin takes aim at the leopard closest to his friends. In a fourth painting, Catlin depicts himself exhibiting Colt's revolving rifle

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<sup>111</sup> Catlin reviews these details in his autobiography, George Catlin, *Life Among the Indians*, London, (London: Gall and Inglis, 1861).

<sup>112</sup> The details of the arrangement are unclear. There is little surviving evidence in the Colt archives besides the finished advertisements. The most extensive discussion of the paintings and the Catlin-Colt connection is found in Elizabeth Mankin Kornhauser, "George Catlin and the Colt Firearms Series." In Houze, Herbert G., Carolyn C. Cooper, and Elizabeth Mankin Kornhauser. *Samuel Colt: Arms, Art, and Invention*, (New Haven: Yale University Press, 2006), 203-245.

<sup>113</sup> Title cited in Kornhauser, "George Catlin," 211.

for a tribe of Carib Indians. Surrounded by native onlookers, Catlin fires at a target over and over, as indicated by the multiple puffs of smoke rising from the weapon. The chief points with astonishment as the rest of the tribe cowers back with mouths agape. A fifth scene depicts a single hunter on horseback firing a revolving rifle at rheas on a lush tropical plain. While most of the series focused on South America, a few of the paintings depict Catlin hunting buffalo in the American West and deer in Pennsylvania.

In 1855 Colt had Catlin's paintings reproduced in high-quality colored lithographs and wood engravings. He then used them in advertisements in both the United States and Great Britain through the 1850s, from the *London Morning Advertiser* and *Parley's Magazine* to the *Saturday Evening Post*.<sup>114</sup> All the paintings present common themes of adventure, excitement, and the exotic. The numerous scenes set in Latin America were designed to attract attention at a time of growing interest in the region as Americans constructed rail lines across the isthmus of Panama and the U.S. Navy conducted expeditions exploring the Amazon River. Tropical animals like flamingoes, rheas, and leopards were intended to draw the curiosity of Colt's targeted audience in the United States, while scenes of hunters in the American West reinforced ownership of the newly acquired region in the American imagination. These advertisements further naturalized the growing American presence in the hemisphere and the spread of American technology around the world. By situating the use of his weapons in these foreign settings, Colt once again sought to connect his name with the outward thrust of the United States in the 1850s.

While the advertisements based on Catlin's paintings represent the most extravagant and visually appealing references to the use of Colt firearms abroad, the more standard single-page

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<sup>114</sup> Kornhauser, "George Catlin," 220.

advertisements Colt issued throughout the 1850s also aimed to connect the Colt brand name with the wider world. A typical full-page advertisement that appeared in the *Scientific American* from the mid-1850s informed potential buyers that “these celebrated arms...have become so well known, not only in this, but in most Foreign Countries.”<sup>115</sup> Another advertisement directed at the British market reminded readers that Colt’s revolvers were “approved by her Majesty’s Hon. Board of Ordnance, and the Most Distinguished Naval and Military Authorities.” It then highlighted their global distribution. The weapons, the advertisement announced, were “in general use throughout the world.”<sup>116</sup> In an extensive article Colt commissioned that appeared in the *United States Magazine* in March 1857, he made doubly sure that his international business was emphasized. After detailing the inner-workings of Colt’s Hartford Armory and carefully listing the most popular types of Colt firearms, the article drew attention to the “marvelous extension of its use.” It carefully described “a market for arms not confined to the United States, but extending over both the Americas, more or less to the Indies, East and West—to Egypt—even to distant Australia—to remote Asiatic tribes assembled at the great Fairs of Novgorood, and over Europe generally.”<sup>117</sup> Colt paid a whopping \$1,120 for the 29-page article (over \$61,000 in 1999 dollars) and almost certainly had a direct influence on its content.<sup>118</sup> Perhaps his voice shines through a bit too obviously when the article places Colt “among the most remarkable inventors of the world.” Either way, the point was clear: Colt’s weapons were used around the world.

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<sup>115</sup> See ad from March 17, 1856 in Colt CSL, Box 66, Folder 2.

<sup>116</sup> Ad from unknown publication, ca. 1857, Colt CSL, Box 66, Folder 2.

<sup>117</sup> “A Day at the Armory of Colt’s Patent Fire Arms Manufacturing Company, Hartford, Connecticut,” *United States Magazine*, New York, Vol. IV, Iss. 3, March 1857, in Colt CSL, Box 66, Folder 2.

<sup>118</sup> The price of the article is cited in Hosley, *American Legend*, 66. Colt was known to personally design his advertisements. The article also contained numerous testimonials that only Colt possessed. Based on the evidence from his archives, it seems he had his agent in London collect any and all testimonials found in newspapers throughout Europe.



As these advertisements illustrate, Colt worked to capitalize on the wide diffusion of his guns. He conducted numerous business trips in Europe, maintained a sales office in London, and sent his guns abroad to Asia and Latin America. But direct income from foreign sales was not the only goal. While lacking the visual flare of the Catlin paintings, these advertisements worked to portray Colt as a successful international businessman. Associating his guns with the spread of American influence around the world was a pioneering marketing technique designed to resonate with Americans at a time when U.S. technological innovation was gaining global attention. The advertisements, together with the Catlin paintings Colt commissioned, shed new light on the global scope of American businessmen in the 1850s.

A testament to Colt's success in connecting his name and product with the outward thrust of the United States was the fact that during the 1850s, many Americans began to look to Colt as an example of their nation's growing presence in the world. In exhibition descriptions, Congressional debates, and honorary speeches, Colt's fellow Americans celebrated his international success as a testament to technological innovation and American greatness. The connection of an American inventor and international business with expanding global power is familiar to historians of twentieth-century business history.<sup>119</sup> The fact these connections were being made in the 1850s reveals the deep roots of how Americans connected their international commercial success with national pride and identity.

In an account of Colt's display at the New York International Exhibition of 1853, *Gleason's Pictorial Drawing Room Companion* informed its readers that "Col. Colt's fire arms

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<sup>119</sup> See, for example, Jenifer Van Vleck, *Empire of the Air: Aviation and the American Ascendancy*, (Cambridge: Harvard University Press, 2013), and Victoria de Grazia, *Irresistible Empire: America's Advance Through Twentieth-Century Europe*, (Cambridge: Belknap Press, 2005).

are now introduced all over Europe.”<sup>120</sup> Horace Greeley’s *New York Daily Tribune* reported on the “beautiful specimens” Colt displayed at the New York Exhibition, as well. “The construction and general efficiency of these pieces are so universally known,” the newspaper explained, “that we need do no more than place this mention of them first among our notices.” After noting that the “English, French, Russian and other foreign departments are nearly destitute of arms,” the paper concluded that gunmakers like Colt “do honor to our country.”<sup>121</sup> At a time of growing sectional conflict, accounts of American commercial success internationally encouraged patriotism and a sense of the growing global significance of the United States, despite the domestic divisions that were increasing at home.

G.T. James, a Senator from Rhode Island, also highlighted the international reputation of Colt’s firearms in a Congressional debate on whether to extend one of Colt’s patents in March 1855. The central point of James’ speech was that Colt deserved the extension because he had failed to make an adequate monetary return on the investments he had made in the initial years of the revolver’s invention and construction. This was a difficult argument to sustain, as Colt was widely known to be a wealthy businessman and was just months away from opening the largest private armory in the world when the question was brought before Congress.<sup>122</sup> Colt’s supporters needed to get creative. After detailing the tribulations Colt initially encountered in the 1840s, James highlighted Colt’s international reputation as a point of national pride and thus a prime reason he deserved the patent extension. “Colonel Colt has received testimonials from almost every civilized nation in the world,” James explained. “In addition to this,” he continued, Colt

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<sup>120</sup> “An Account of the Display of Colt’s Firearms at the Crystal Palace in New York, 1853,” *Gleason’s Pictorial Drawing Room Companion*, November 1853, clipping in Colt CSL, Box 66, Folder 1.

<sup>121</sup> Horace Greeley, eds., *Art and Industry as Represented at the Crystal Palace, New York—1853-4, Showing the Progress and State of the Various Useful and Esthetic Pursuits*, (NY: Redfield, 1853), 137-140.

<sup>122</sup> Colt’s armory on the banks of the Connecticut River opened in the summer of 1855, just a few months after Congressional debate on his patent extension.

“received the large medal at the World’s Fair in London... and to crown all, Colonel Colt was chosen a member of the society of civil engineers in England.”<sup>123</sup> In his description, James depicted Colt as no less than a national hero, crowned in London and famous throughout the world. Although the accolades failed to convince enough Congressmen to vote for Colt’s patent extension, they reminded government officials and those in the gun community watching the case of Colt’s growing international reputation.<sup>124</sup>

This reputation would again be brought to the fore in a series of speeches delivered at a ceremony to honor the completion of Charter Oak Hall, a massive four-story building Colt constructed on his property in Hartford to hold lectures, mechanical classes, and balls. On the evening of May 6<sup>th</sup>, 1856, a gala was held to celebrate the occasion. Colt’s workers and their families mingled with the prominent members of high Hartford society as the newly formed Armory Band treated the nearly thousand-strong audience to music for the evening.<sup>125</sup> After the crowd settled in, the first of three speakers took the stage. Mr. Hamersley, a local businessman and politician, began by reminding the audience of the global reach of the property on which they stood. “The value of the new weapon is at length universally acknowledged,” Hamersley proudly announced, “and the name of Samuel Colt is now more widely known throughout the world than that of any other living American inventor.”<sup>126</sup> The Mayor of Hartford, Henry C. Deming, spoke after Hamersley and reiterated the point, asserting that Colt’s firearms are known “all the world over, from California’s mountains to Coromandel’s coast [on the Indian subcontinent].”<sup>127</sup>

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<sup>123</sup> U.S. Congress, *Congressional Globe*, 33<sup>rd</sup> Cong., 2<sup>nd</sup> sess., March 3, 1855, “The Colt Patent,” Speech of Hon. G.T. James, of Rhode Island, in the Senate, 369.

<sup>124</sup> There is no evidence Colt received an extension on the patent in Colt CSL, Box 45. No patents or extensions were issued from March 1851 to March 1856.

<sup>125</sup> Description of the evening contained in Aldean, *Dedication*.

<sup>126</sup> Aldean, *Dedication*, 10.

<sup>127</sup> Aldean, *Dedication*, 41.

The keynote speaker, Isaac W. Stuart, a local historian and native celebrity of Hartford, followed the pattern set by Hamersley and Deming.<sup>128</sup> “I am here tonight,” Stuart announced, “to initiate into the family of Halls this fresh offspring of the trowel, the chisel, the plane, and the painter’s art.”<sup>129</sup> In situating the hall in time, Stuart told “a three-fold history... first Indian, then Dutch, then English” before arriving at the current moment. “This modern designation,” Stuart proudly proclaimed, “is Colt’s armory!”<sup>130</sup> The modernity represented by the colossal factory across the Hall was not static or immobile, but, like the United States of the mid-nineteenth century, was extending American influence around the world. “An adventurous Yankee sailor boy may rise from a dark and cheerless orphanage upon the seas to claim kindred with the highest inventive genius of the land.” The product of that genius, Stuart continued, “from the snow-capt [sic] Nevadas [sic] on the Pacific, to the blood-red plains of Crimea, the mountains of the Caucasus, and the jungles of Hindostan [sic]... reports the triumph of American skill, and blazes the fame of an American name!”<sup>131</sup>

Like Senator James and his descriptions of Colt’s exhibits in London, the speakers at the celebration to open Charter Oak Hall highlighted the global reputation of Colt’s firearms and celebrated it as part of the larger thrust of the United States in the world in the 1850s. During the years between the end of the Mexican-American War and the Civil War, the United States had begun to emerge as a technological leader on the world stage. As it did so, Colt’s firearm was the first American mass-produced consumer product to find an extensive global market in the nineteenth century. By the end of the 1850s, these weapons could be found from Russia and

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<sup>128</sup> Aldean, *Dedication*, Stuart, overlooked Charter Oak, “and by virtue too of my own particular warrant as the lawful proprietor of the Oak itself,” 33.

<sup>129</sup> Aldean, *Dedication*, 13.

<sup>130</sup> Aldean, *Dedication*, 17.

<sup>131</sup> Aldean, *Dedication*, 24.

Great Britain to Brazil and Japan. While Colt endeavored to connect his name with his international business, his contemporaries celebrated the global spread of his product as a symbol of the growing American presence around the world.

### Minarets in Hartford: How the International Impacted the Domestic

Just a few months after the gala celebrating the opening of Charter Oak Hall, another building on Colt's property was completed. Samuel and his wife Elizabeth moved into Armsmear, as their home became known, in the summer of 1857. The extravagant mansion was three stories high with a five-story observation tower in the southwest corner overlooking Colt's armory and the Connecticut River. With over twenty rooms, it was one of the largest private residences in the Northeast.<sup>132</sup> It was also one of the most eclectic. Its design was based on the Italian villa style then in vogue in Hartford, though it had several more exotic touches.<sup>133</sup> The roof was peppered with Turkish minarets and the home was centered around a conservatory modeled after the London Crystal Palace. The gardens contained fruit from the tropics and flowers from Asia, while the home itself was decorated with lavish furniture from all corners of Europe.<sup>134</sup> An examination of Colt's property blurs the lines that separate the United States from the outside world. Indeed, just as Colt and his revolvers went out into the world, the world came to Hartford through Colt's channels.

Construction of Armsmear commenced in 1855 and the couple began purchasing furniture and decorations while on their honeymoon in Europe during the fall of 1856.<sup>135</sup> Like

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<sup>132</sup> The residence is described by Barnard in *Armsmear*, pages 69-114. Barnard extensively toured the property in the course of writing a memorial for Samuel Colt, which was published four years after his death in 1866.

<sup>133</sup> Hosley, *American Legend*, 140.

<sup>134</sup> Barnard, *Armsmear*, 87-89.

<sup>135</sup> Dates in Barnard, *Armsmear*, 312.

many elite Americans during the mid-nineteenth century, the Colts deferred to European cultural tastes.<sup>136</sup> While in France, they began a relationship with the Parisian firm Ringuet-LePrince and Marcotte, a high-end decorating house with an office in New York. One of the founders, Leon Marcotte, emigrated from France following the failed 1848 revolution and displayed at the New York Crystal Palace of 1853, which is probably where Colt was first exposed to their merchandise.<sup>137</sup> By the time the newlyweds moved in, they had spent the equivalent of nearly \$600,000 decorating their home.<sup>138</sup> The various sitting areas in the house were ornamented with French rococo style chairs and gilt cornices, while specially made French-silk rugs covered most of the floors. The walls were covered with Italian paintings and dozens of lithograph pictures Colt ordered while in Berlin.<sup>139</sup> Colt occasionally oversaw even the most minute design details. While in Moscow on his honeymoon, he wrote to Marcotte requesting a particular set of locks from fellow American and Crystal Palace celebrity Alfred Hobbs. “I want to have the small locks that were furnished to me from London by Mr. Hobbs,” Colt instructed. He also told Marcotte to furnish a set of chairs with “embroidery and Poch Persian work that I purchased at the great Asiatic Fair Novergorov [Novgorod, Russia].”<sup>140</sup> Hand-woven chair covers were not the only thing Colt brought back from Russia—he also carried the inspiration for the most exotic touch to his home, the Russian minarets that adorned the roof of Armsmear.

Russian articles were also well-represented in the Cabinet of Memorials, which displayed the various awards and gifts Colt received from around the world.<sup>141</sup> A golden snuff-box from

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<sup>136</sup> Daniel Walker Howe, eds. *Victorian America*, (Philadelphia: University of Pennsylvania Press, 1976). For European influences on American cultural tastes, also see David F. Bowers, ed. *Foreign Influences on American Life*, (Princeton: Princeton University Press, 1944).

<sup>137</sup> Information on the firm found in Phillip M. Johnston, “Dialogues Between Designer and Client: Furnishings Proposed by Leon Marcotte to Samuel Colt in the 1850s,” *Winterthur Portfolio* 19, no. 4, (1984): 257-75.

<sup>138</sup> Estimate in Johnston, “Dialogues,” 273.

<sup>139</sup> Described in Hosley, *American Legend*, 142.

<sup>140</sup> Sam Colt, Moscow, to Leon Marcotte, New-York, September 16, 1856, cited in Johnston, “Dialogues,” 260-61.

<sup>141</sup> The Cabinet is described in detail by Barnard in *Armsmear*, 115-137.

Emperor Alexandre II of Russia sat next a similar snuff-box from the Sultan of the Ottoman Empire, and a diamond-studded ring from Czar Nicholas lay beside a ring from the King of Sardinia, Charles Albert. While less ornate, a set of vest and sleeve buttons were displayed. They were given to Colt in Paris during a chance encounter with a Texan who used his weapons while fighting in the Mexican-American War. Twenty-four medals of honor were also exhibited, included the Telford Medal presented by the British Institute of Civil Engineers and the Turkish Order of the Medjidie, which Sultan Abdulmejid I of the Ottoman Empire sent Colt in 1860. Other medals represented Colt's more local activities, such as the five he won at fairs sponsored by the American Institute. A richly enamored gold and silver table vase accompanied other gifts from Siam, such as a golden cigar-case and a teapot. Two Japanese samurai swords delivered upon Perry's return from Japan in 1855 were displayed along with a dagger from the East Indies and early prototypes of Colt's revolvers. Along with the Russian minarets and the European decorations, the Cabinet of Memorials added an international character to the Colt's home.

Isabella Beecher Hooker, a Hartford resident and writer, was struck by the "exquisite little architectural affair" when she visited Armsmear in 1857. "It is all iron and glass a la Crystal Palace," referencing the building in London that housed the first International Exhibition in 1851. She then went on to detail the "beautifully shaped dome & pointed little minarets, somewhat Turkish in idea," that made the mansion seem "like a fairy palace."<sup>142</sup> By the time the Colts moved into Armsmear in February 1857, both the exterior and interior had a decidedly international flare that was impossible to miss.<sup>143</sup> In a way, Colt's home can be seen as another advertisement, an elaborate attempt to connect his name with his international business. The tall

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<sup>142</sup> Quoted in Hosley, *American Legend*, 138.

<sup>143</sup> Date in Barnard, *Armsmear*, 312.

glass panels of the conservatory would remind visitors of his success at the Crystal Palace, while the Russian domes pointed to the wide global markets for his arms.

In other ways, though, his home and the things they contained shed light on the complex ways Americans interacted with the wider world in the 1850s. Far from parochial and inward-looking, the Colts actively sought to bring the world into their American home. Indeed, it is difficult to disentangle the United States from the world when examining Armsmear. From the pineapples in the garden and the Persian covers on the chairs to the ornate Ottoman snuff-box and the Japanese tableware, the Colt's home exuded a global sensibility that reflected the impact their travels had on their identities.<sup>144</sup> This sensibility was on display on a warm summer evening in 1860 when the Colts attended a Newport society ball. Eschewing the traditional black and white attire of an American gentleman, Samuel Colt showed up in an exotic Turkish outfit with bright multicolored strips from head to toe.<sup>145</sup> Elizabeth was also known to wear foreign garb. She would often host her "Oriental Tea Parties," as the *Hartford Daily Times* called the events, wearing Russian dress.<sup>146</sup> As the Colts' aesthetic sensibility shows, even as the United States emerged on the world stage as a technological leader and beacon of the future, it was shaped by global currents and international exchange.

Colt's life, which lasted from 1814 to 1862, spanned the period between the War of 1812 and the Civil War during which the United States transitioned from a predominately agricultural economy dependent on Great Britain for technology to an industrial powerhouse and technological innovator. By the 1850s, European travelers were consistently astonished at the

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<sup>144</sup> Barnard describes tropical fruits, including pineapples, in *Armsmear*, 87.

<sup>145</sup> *Newport Daily News*, August 2, 1860. Cited in Hosley, *American Legend*, 30.

<sup>146</sup> *Hartford Daily Times*, June 5, 1874, cited in Hosley, *American Legend*, 250. Also see Mari Yoshihara, *Embracing the East: White Women and American Orientalism*, New York: Oxford University Press, 2003, and Kristin Hoganson, *Consumer's Imperium: The Global Production of American Domesticity, 1865-1920*, (Chapel Hill: The University of North Carolina Press, 2007).



widespread use of machines they witnessed in the United States. In many ways, Colt's career embodied this transition. Colt himself worked in the textile mills of the northeast that were based on British models and British machinery during his youth. He observed the spread of mechanization beyond the textile industry through the 1830s and 1840s and sought out one of the most talented and visionary engineers in the world, Elisha K. Root, to design his armory and streamline the production process in 1848. Indeed, Root's work at Collins coincided with a major transition in the history of technology from the early industrial revolution centered on the textile industry to the second industrial revolution of the later third of the nineteenth century, which saw the spread of mechanization and mass-production to a whole host of complex metal products, from typewriters and bicycles to agricultural implements and automobiles.<sup>147</sup>

When Colt embarked on his first major overseas business trip in 1849, he was not peddling tobacco or simple textiles, but a complex mass-produced product. In successfully taking this product out into the world, Colt was part of a first wave of American international businessmen that would grow to inspire cries of the "Americanization of the world" by the turn of the twentieth century.

As part of this first wave, Colt pioneered a set of business and advertising practices that would be built upon by international American businessmen for decades. While selling his weapons abroad, Colt demonstrated a flexibility as he adapted to the different conditions of different nations. In Great Britain he experimented with opening a factory, which became the first example of a multinational business in American history, while in Russia he sold weapons directly to the Czar in Moscow. In Belgium he licensed the production of his weapons to local arms makers in Liège and even went as far as to sell them gun-making machinery. Sometimes

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<sup>147</sup> Hounshell describes this transition in Hounshell, *From the American System*, (Baltimore; The Johns Hopkins University Press, 1984).

his weapons spread with the American state, like when they were carried by the American Navy to Japan, Siam, and Brazil. At other times, Colt operated below the state, like when he presented Louis Kossuth two decorated revolvers or sold Giuseppe Garibaldi nearly one hundred thousand of weapons during the Second War of Italian Unification. Throughout his career, he worked tirelessly to connect his weapons with the growing presence of the United States in the world. His novel arrangement with the American artist George Catlin depicting the use of his weapons in the wilds of the Amazon reveal Colt's determination to associate his name with the wider world. His typical advertisements of the 1850s consistently stressed the global spread of his weapons, foreshadowing a technique used by nearly every major American multinational corporations in the late-nineteenth century.<sup>148</sup> He also exported the cutting-edge machinery used to mass-produce his guns as well. By the time of his death in 1862, Colt had sent machinery to Great Britain, Belgium, and Russia, a testament to the growing technological superiority of the United States.

But if Samuel Colt's career was extraordinary, it was not unique. Colt's hometown of Hartford was situated in the heart of the Connecticut River Valley, a region of the United States teeming with mechanics, engineers, and inventors that has been called the Silicon Valley of the mid-nineteenth century.<sup>149</sup> The arms industry in particular was a catalyst for technological innovation. In the thirty years before the Civil War, nearly twenty firearm companies were established in the region.<sup>150</sup> Many of them followed the path Colt blazed in the 1850s and increasingly sold their guns and machinery abroad in the decades following the Civil War. After

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<sup>148</sup> Mona Domash, *American Commodities in an Age of Empire*, (New York: Routledge, 2006).

<sup>149</sup> Tucker, *Industrializing*, 71.

<sup>150</sup> Felicia Johnson Deyrup, *Arms Makers of the Connecticut Valley; A Regional Study of the Economic Development of the Small Arms Industry, 1798-1870*, (Menasha, WI: George Banta Publishing Company, 1948), 121. Even in the midst of this intense competition, Colt was by far the largest producer during his lifetime, with over double the capital and five times the arms produced than his nearest competitor. Deyrup, *Arms Makers*, Appendix A, Graph 4, 220.

exhibiting their arms at the Paris Exposition of 1867, Smith & Wesson received large contracts from China, Japan, Russia, France, Spain, and numerous South American nations. Francis Pratt of Pratt & Whitney made numerous journeys to Europe in the 1870s.<sup>151</sup> Following the Franco-Prussia war, the company sold Germany over \$350,000 worth of gun machinery.<sup>152</sup> Winchester sold arms to Australia, China, France, Japan, and Turkey during the period.<sup>153</sup> While Colt achieved wide fame and prosperity during his lifetime, he was just part of a growing surge of American businessmen pushing out into the world.

It is important to remember that while Colt led this surge, he brought back different cultures, tastes, and perspectives that changed what it looked like to be an American businessman in the 1850s. From his Turkish dress to his exotic furniture, Colt's aesthetic sensibilities reflected the impact his international travels had on his identity. A visitor to his home in Armsmead would find it challenging amongst the Japanese tableware and Turkish minarets to identify where the United States ended and the world began. An analysis of Colt's international success highlights important ways the United States both influenced, and was in turn shaped by, the wider world in the 1850s. The patterns of exchange pioneered by Colt would continue to grow and transform both the United States and the world in the decades that followed.

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<sup>151</sup> Ibid., 210-211.

<sup>152</sup> Roe, *British & American Toolmakers*, 179.

<sup>153</sup> Deyrup, *Arms Makers*, 211. Brian DeLay examines the flood of American-made firearms into Mexico during the nineteenth century in Brian DeLay, "How Not to Arm a State: American Guns and the Crisis of Governance in Mexico, Nineteenth and Twenty-First Centuries," *Southern California Quarterly* 95, no. 1, (2013): 5-23.

## Chapter Four: Reimagining the Place of the U.S. in the World in the 1850s

In the spring of 1849, Asa Whitney, a recently retired New York merchant, embarked on a nation-wide tour to popularize his plan for a transcontinental railroad, to span from the Great Lakes to the Pacific Ocean. Though he first proposed the idea to Congress in May of 1845, there was little movement towards approving it as the nation focused on the looming war with Mexico.<sup>1</sup> But with the cessation of the conflict in 1848 and the subsequent additions of California and the New Mexican territories to the United States, Whitney sensed his moment had arrived. During his 1849 tour, Whitney addressed state legislatures, chambers of commerce, and mass meetings to popularize his plan for a transcontinental railroad.<sup>2</sup> He dazzled audiences with statistics of the travel-time that would be saved between the bustling harbors of New York and the golden shores of San Francisco. He prophesized on the economic expansion that would inevitably result and argued for the superiority of his proposed route. Before he dove into the details, however, Whitney began his presentations by displaying a single map. It did not depict his proposed rail route across the United States—that would come later in the presentation. Rather, it was a map of the world, though with an unusual focal point. As an excited audience member described it, following Whitney’s presentation to the State Legislature of Pennsylvania, “This skeleton map places America in the middle, and most admirably exhibits what is most eminently to be desired, that the whole people of the United States should see and appreciate, the great advantage of the relative position possessed by America.”<sup>3</sup>

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<sup>1</sup> The memorial appears in its entirety in Asa Whitney, *To the People of the United States, 1797-1872*, 7-10, accessed March 5, 2018, <https://babel.hathitrust.org/cgi/pt?id=hvd.32044014249122;view=1up;seq=13>.

<sup>2</sup> Robert Royal Russel, *Improvement of Communication with the Pacific Coast as an Issue in American Politics, 1783-1864*, (Cedar Rapids: Literary Licensing, LLC, 1948), 15.

<sup>3</sup> A.W.D. “The Proposed Railroad to the Pacific,” *The Merchants’ Magazine and Commercial Review*, Vol. 21, Iss. 2, (August 1, 1849), 195.

While Whitney's specific plan never gained enough public or political support to receive federal funding, his 1849 tour contributed to a growing national discussion not only on the desirability of a transatlantic railroad but also on the place of the United States in the world. Much like Whitney had done with his map, many Americans in the 1850s began to reimagine themselves and their nation as being at the center of an increasingly interconnected global commercial system. In a speech to the U.S. House of Representatives in 1852, Texas Congressman V.E. Howard articulated this new understanding of the position of the United States in the world when he announced, "The United States are situated in the center of the world's commerce and production."<sup>4</sup> The acquisition of a vast Pacific coastline following the settlement of the Oregon Question and the Mexican-American War played a key role in encouraging Americans to reimagine their location. As the *Southern Literary Messenger* described in January of 1850, "The nation is now undergoing the process of realizing to itself the immense change which the settlement of Oregon and the acquisition of California have made in its position."<sup>5</sup> Beverly Tucker, publisher of the *Washington Sentinel*, concurred in an editorial printed in September of 1853.<sup>6</sup> "Our vast extension of territory and increase of commercial business," Tucker asserted, "have brought us into immediate contact with all the nations of the world."

Statements and conversations about the relative position of the United States among other nations were about much more than geography—they reflected a growing confidence and assertiveness many Americans cultivated in the 1850s as they advocated the United States take a

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<sup>4</sup> Speech of Hon. V.E. Howard, of Texas, in the House of Representatives, July 6, 1852. "Pacific Railroad—Collins Steamers," Appendix to the *Congressional Globe*, 32<sup>nd</sup> Cong. 1<sup>st</sup> Sess., 776-780. 777.

<sup>5</sup> "Our Foreign Policy," *Southern Literary Messenger*, Volume 16, Is. 1, (January 1850), 1.

<sup>6</sup> Beverly Tucker, "Our Foreign Relations," *Washington Sentinel*, Vol. 1, No. 1, (September 24 1853), 2, accessed April 2, 2018, <https://chroniclingamerica.loc.gov/lccn/sn84020104/1853-09-24/ed-1/seq-2/>.

more robust stance in the world. The Texas representative quoted above not only sought to impress on his fellow Congressmen the central position of the United States; he also called for federal funding for a transcontinental railroad, subsidized mail steamers to Europe and China, and a rapid expansion of the American navy.<sup>7</sup> After discussing current events in Mexico, Hawaii, Europe, China, Japan, and Cuba, Beverly Tucker of the *Washington Sentinel* contended that “the change in the position of the United States requires in its bearing the rejection of antiquated ideas, of inapplicable maxims, and of hoary prejudices” that limited American foreign policy in the past.<sup>8</sup> And the *Southern Literary Messenger* called on the United States to secure a Nicaraguan canal and “become a great naval power.”<sup>9</sup>

This new assertiveness, significantly, was about more than simple territorial aggrandizement. While filibusters dreamed of planting the American flag in Central America and some politicians openly contemplated the acquisition of Cuba during the 1850s, most of the conversations about an expanded presence of the United States focused not on landed expansion, but instead on linking the world together into an American-centered commercial system. Indeed, the 1850s was a key moment during which Americans perceived that the world was rapidly connecting into a single system. The increasing spread of the telegraph, rapid extension of rail, and tremendous growth of steamships plying between the world’s harbors impressed on many Americans that a grand process of global unification was unfolding before their eyes. As Henry Howe, a popular author and historian from Connecticut, proclaimed in a compendium of travel narratives published in 1856, “The whole world are now near neighbors.”<sup>10</sup>

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<sup>7</sup> Howard, “Pacific Railroad—Collins Steamers,” 777.

<sup>8</sup> Tucker, “Our Foreign Relations,” 2.

<sup>9</sup> “Our Foreign Policy,” *Southern Literary Messenger*, 1.

<sup>10</sup> Henry Howe, *The Travels and Adventures of Celebrated Travelers in the Principal Countries of the Globe*, (New York, Henry Howe, 1856), iii.

As Americans perceived these processes, they were not content to simply watch them develop from within the United States. Many stridently called on their fellow Americans to embrace these processes and shape them to the nation's benefit. Such calls animated a wide range of foreign policy conversations in the 1850s, from subsidized ocean steamers, Central American canals, and transcontinental railroads to coaling stations in the Pacific and intercontinental telegraphs across Siberia. While most of these were not "expansionist" in the traditional sense of acquiring more territory, they all demanded for a more vigorous place for the United States in the world. As Americans suddenly found themselves at the center of a rapidly interconnecting world—as Asa Whitney portrayed in his map—many called on the United States to embrace the project of connecting the world around an American center.

In the following chapter, I explore how Americans reimagined their place in the world during "the long 1850s" between the end of the Mexican-American War in 1848 and the onset of the Civil War in 1861. To do so, I focus on three key sets of voices. First, I examine how politicians reimagined the United States in the world as they debated the construction of the transcontinental railroad, federal subsidization of steamships, and the various ways to solidify an American presence in the Pacific Ocean. Second, I examine how the commercial press reinforced this new understanding of the United States' place in the world as editors and journalists pressed Americans to engage in the process of global interconnectedness that was reshaping the commercial world around them. And third, I analyze the efforts of American businessmen to influence foreign policy and entice American policymakers to back projects that more tightly bound the world by steam power and telegraph lines to the United States. The central argument of this chapter is that while all three of these sets of actors backed different projects and pursued widely diverse tactics to achieve their respective goals, they were united by

a new understanding of the place of the United States in the world. This understanding located the nation at the center of an ever-tightening global commercial system. In embracing this vision of the world and the United States' position in it, they established an important foundation for later American policymakers who continued to expand the nation's presence abroad in the late-nineteenth century.

### Across Our Bosom: Situating the Transcontinental Railroad in the World

Along with his nation-wide tour, the New York businessman Asa Whitney published a book in 1849 entitled *A Project for a Railroad to the Pacific*. In the work, which was addressed “to the People of the United States,” Whitney described how he became involved in developing his plan for a transcontinental railroad.<sup>11</sup> He had spent much of the 1830s plying the waters between Asia and the eastern United States and had earned a small fortune specializing in the China trade in New York. Then, sometime around 1843, Whitney sold everything and began touring the Far East.<sup>12</sup> “During a residence of nearly two years in Asia,” Whitney explained, “I collected all the information within my reach... of the population, productions, and commerce of Japan, China, Polynesia, all the islands, and all India.” He became convinced of “the capacity of a population of 700,000,000 for an increased trade with us, provided a means of cheap and frequent intercourse and transit could be established.”<sup>13</sup> On his long, nearly four-month journey back to New York around the Cape Horn of South America, he became convinced that a

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<sup>11</sup> Asa Whitney, *A Project for a Railroad to the Pacific*, (NY: George W. Wood, 1849), iii, accessed March 6, 2018, <https://archive.org/stream/aprojectforarai00whitgoog#page/n9/mode/2up>.

<sup>12</sup> For a brief biography of Whitney, see Margaret L. Brown, “Asa Whitney and His Pacific Railroad Publicity Campaign,” *Journal of American History*, Vol. 20, Iss. 2, (September 1, 1933): 209-224.

<sup>13</sup> Whitney, *A Project*, 4.



transcontinental railroad was the only plausible solution to reduce transport cost and stimulate trade.

Back home in the spring of 1845, Whitney began surveying potential routes for the railroad. “With a company of young gentlemen from different States,” Whitney described, “I explored and examined more than 800 miles of the route” north and south along the Missouri River.<sup>14</sup> Having determined the most convenient place to bridge the Missouri paralleled the fledgling town of Milwaukee, Wisconsin, Whitney set about devising a specific plan to construct the railroad as soon as possible. While most contemporary major railroad projects relied on land grants from individual states, most of the land Whitney’s proposed transcontinental railroad would cross had not achieved statehood. Thus, Whitney proposed a novel plan. “I ask of Congress to set apart, and sell (not grant) to me sixty miles in width of the public lands, from Lake Michigan to the Pacific Ocean,” he explained in his book.<sup>15</sup> He would then oversee the construction of the line, and for every ten miles that was completed, he would be permitted to sell the contiguous land.

More important than the exact details of Whitney’s plan, however, was the way in which he framed the overall necessity of the project. This was no simple highway, in Whitney’s vision, but indeed a grand mission for humanity. “The subject of a railroad communication directly across our continent to the Pacific Ocean,” Whitney emphasized to his fellow Americans, was “of vast importance, not only to the people of these United States, but also to all the world.”<sup>16</sup> And while the transcontinental railroad would become a “great highway for nations,” the United States would benefit the most. “It would give us control of, and make the commerce of the world

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<sup>14</sup> *Ibid.*, 5.

<sup>15</sup> *Ibid.*, 9-10.

<sup>16</sup> *Ibid.*, iii.

tributary for us, the grand thoroughfare for all the nations of the earth,” Whitney prophesized.

“And here on this continent would be the great banking house—the Grand Exchange for all the world.”<sup>17</sup> This result was not only desirable, he contended, but inevitable.

In making this final point, Whitney zoomed out of the specific route or even the immediate global implications to situate the project in the larger history of the world. “The change in the route for the commerce with Asia,” Whitney explained, “has since before the time of Solomon even, changed the destinies of Empires and States.” And throughout history, the commerce of Asia “has marched west. Each nation, from the Phoenicians to proud England, when supplanted, or forced to relinquish it, has declined... and a new nation west, [has] risen up, with vigor and life, to control all.” The United States, according to Whitney, was next in line. “When this road shall have been completed, that commerce, with civilization, will have encircled the globe. It can go no further. Here, then, would be the consummation of all things.” According to this vision, the United States would take the baton of the profitable Asian trade and the central position in global commerce just as the final links that connected the world were being forged. “Here we should stand forever,” Whitney prophesized, “reaching out one hand to Asia and the other to all Europe, willing that all may enjoy the great blessing which we possess.”<sup>18</sup> Through this framing, Whitney took an ostensibly domestic initiative—a railroad from the Great Lakes to the Pacific Ocean—and imbued it with grand historical and global significance. In this telling, numerous factors had converged to present Americans with an extraordinary opportunity to shape and harness the rapidly connecting commercial world around the United States.

While Whitney led the way in popularizing the idea of a transcontinental railroad beginning with his first memorial to Congress in 1845, by the summer of 1849 numerous

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<sup>17</sup> *Ibid.*, 38.

<sup>18</sup> *Ibid.*, 40.

alternative plans were competing for attention. In July, J.B.D. De Bow, editor of the influential New Orleans-based *De Bow's Review*, penned an article entitled "Intercommunication between the Atlantic and Pacific Oceans," in which he reviewed four transcontinental railroad propositions. As a statistician, De Bow carefully documented the details of Whitney's plan alongside those of General Houston, who proposed a route from Galveston, Texas, to San Diego, and Senator Thomas Benton of Missouri, who proposed the terminus of the route to be at St. Louis. Ultimately, De Bow threw his support behind a fourth plan that terminated at Memphis, Tennessee.

De Bow's and Whitney's disagreements over the ideal terminus of the road—the former pulling for Memphis, the later for Milwaukee—exposed sectional fault lines between the North and the South. Yet significantly, both sides explicitly attempted to downplay this disagreement for what they argued was the greater national good. After reviewing the various routes and endorsing the Memphis plan, De Bow emphasized, "That if a great rail road be constructed through the possessions of the United States to the Pacific, that road *must be as nearly as can be CENTRAL*, to enlist the sympathies, regards, and co-operation of *all sections of the confederacy*."<sup>19</sup> Whitney echoed this sentiment in his 1849 book when he maintained, "It is, and has been my desire that every section and interest of our widespread country may participate equally in the great benefits to flow from this work. Nature, not myself," Whitney claimed, "has prepared the way and the means"<sup>20</sup> of a northern route.<sup>20</sup> Indeed, by the fall of 1849 Whitney's

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<sup>19</sup> J.D.B. De Bow, *De Bow's Review*, "Intercommunication Between the Atlantic and Pacific Oceans," Vol. 7, Iss. 1, (July 1849): 1-37, 30, accessed April 17, 2018, [https://quod-lib-umich-edu.ezproxy.lib.usf.edu/m/moajrnl/browse\\_journals/debo.html](https://quod-lib-umich-edu.ezproxy.lib.usf.edu/m/moajrnl/browse_journals/debo.html). Italics and capitalization in original.

<sup>20</sup> Whitney, *A Project*, 31.

plan had been endorsed by not only numerous northern state legislatures, but also many southern states as well, including Kentucky, Mississippi, and Georgia.<sup>21</sup>

More significant than the disagreement over the most desirable terminus was the similarity in the language and framing used to drum up support for the project. Indeed, Whitney's most lasting contribution was not his specific plan, but the way he repositioned the United States in both place and time to emphasize the urgent need for the railroad. De Bow borrowed this framing even as he backed a southern route. According to De Bow, through all of history, the East "held out golden visions of unlimited trade to all civilized nations." This trade "which built up Alexandria—which caused Venice to spring from the marshes of the Adriatic... the East that enriched the Portuguese, enabled the Dutch to compete, and gave at last to their great rival across the channel," Great Britain, now beckoned the United States. "Western America," De Bow asserted, "may have her high destiny too."<sup>22</sup> Like Whitney, De Bow contended all that was needed to transfer global commercial hegemony from Great Britain to the United States was the transcontinental railroad. "We want the road," De Bow proclaimed, "to complete for us that *commercial Empire* after which we have sighed—which has been indicated for us in every step of our progress, from the landing of the Pilgrim Fathers, and which appears to be ours by a manifest and inevitable destiny."<sup>23</sup> Here De Bow extended the geography of "manifest destiny" from a westward progression of American settlers across the continent to a globally-centered hegemonic "commercial empire." Despite the fact they backed different routes for the transcontinental railroad, both Whitney and De Bow downplayed sectional conflict and

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<sup>21</sup> Endorsements reprinted in *Ibid.*, 35-47.

<sup>22</sup> De Bow, "Intercommunication," 5.

<sup>23</sup> *Ibid.*, 32. Italics original.

instead emphasized the arrival of a grand historical moment in which the United States would assume the crown of global commercial supremacy.

In the winter of 1849, Senator Thomas Benton, a Democrat from Missouri, delivered a speech to the Senate supporting his bill to federally fund a transcontinental railroad that terminated at St. Louis. Like Whitney and De Bow, Benton downplayed sectional politics to emphasize the grand historical moment which demanded action. “The road which I propose will be national in character,” Benton assured his fellow Congressmen. “Fortunately,” Benton observed, “the bay of San Francisco, the finest in the world, is in the center of the western coast of North America.” Natural geography dictated the railroad would bisect the United States and thus benefit the north and the south equally.<sup>24</sup> Benton went on to emphasize the central position of the United States in the world. “The European merchant, as well as the American,” Benton claimed, “would fly across our continent on a straight line to China. The rich commerce of Asia will flow through our centre.” Like Whitney and De Bow, Benton described the movement of world trade to the United States as the culmination of a grand historical process. “The trade of India, which has been shifting its channels from the time of the Phoenicians to the present, is destined to shift once more,” Benton prophesized. “The state of the world calls for a new road to India... the last and greatest.” This “last shift” would cement for the United States its central position as the commercial hegemon of the world. “Let us act up to the greatness of the occasion,” Benton urged his fellow Senators, “and show ourselves worthy of the extraordinary circumstances in which we are placed.”<sup>25</sup>

Despite downplaying sectionalism and instead emphasizing the national glory that awaited the United States, Benton ultimately failed to secure enough Congressional support for

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<sup>24</sup> Senator Thomas Benton, “The Road to India,” 1849, 30<sup>th</sup> Cong., 2<sup>nd</sup> Sess., 472.

<sup>25</sup> *Ibid.*, 474.

his bill. Part of the challenge was the proliferation of different plans. The National Railroad Convention, held in Philadelphia in April 1850, attempted to secure the approval of Whitney's plan, but delegates also considered Benton's plan, a Rhode Island plan, and the St. Louis Convention's plan.<sup>26</sup> Despite numerous attempts, the delegates were unable to reach a consensus. The division at the National Railroad Convention was reflected in the division in Congress. During 1850 Congress was preoccupied with the Compromise Bill to admit California and opted to postpone action on the railroad bill, though it did appropriate \$50,000 to survey three different routes.<sup>27</sup>

Despite Congressional inaction, the language and framing pioneered by Whitney and echoed by De Bow and Benton became more and more common in political discussions about the place of the United States in the world. In arguing for the admittance of California as a free state during the Compromise Bill debates in 1850, for example, New York Senator William H. Seward adopted this new framing. The United States "offers supplies on the Atlantic shores to the overcrowded nations of Europe, while on the Pacific coast it intercepts the commerce of the Indies. A nation thus situated," Seward argued, "must command the empire of the seas."<sup>28</sup> *The American Whig Review*, the official organ of the northern-based Whig party, echoed Seward in November of 1850. After arguing for the adoption of Whitney's plan, the paper zoomed out. The completion of the transcontinental railroad would inevitably draw the channels of global trade through the United States. "Agricultural products, and of every other species of merchandise... between Europe and Asia, in a word, between a population of 250,000,000 in Europe... and

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<sup>26</sup> Russel, *Improvement of Communication*, 52.

<sup>27</sup> *Ibid.*, 52.

<sup>28</sup> William H. Seward, *Congressional Globe*, March 11, 1850, Appendix, 262.

500,000,000 in Asia” would flow “across our bosom,” the *Whig Review* asserted.<sup>29</sup> And *The Merchant’s Magazine and Commercial Review*, the leading New York-based commercial publication of the period, celebrated the suddenly realized centrality of the United States.

“Bathed on the two opposite sides by the great highway of oceans, Europe, Asia, and Africa are faced on the East, and Asia and Oceanica on the west. Thus formed and situated,” the author predicted, “America must become, and thenceforward remain, the highway of nations.”<sup>30</sup>

Despite the fact both Whigs and Democrats supported the transcontinental railroad, the proliferation of different plans and the hardening of sectional sentiment over the geography of the proposed terminus made compromise difficult. During the peak years of debate between 1852 and 1854, many southern Democrats began to insist upon a southern route. In Congress in August of 1852, for example, J.D. Freeman of Mississippi urged his fellow southern representatives to back a “southern Atlantic and Pacific Railway.”<sup>31</sup> De Bow also abandoned his more conciliatory tone as he too began to demand a southern route and publicize information about southern companies who were endeavoring to complete the project.<sup>32</sup>

In a last-ditch effort, Senator William McKendree Gwin, a Democrat representing California, proposed a compromise bill that included funding for the construction of the line from San Francisco. When the railroad neared the Mississippi River, it would break off into six branch lines that would terminate in six different cities across the north and south and thus safely satisfy both southern and northern supporters of the project. Advocates rallied behind the plan and a special committee of three Democrats and two Whigs unanimously endorsed the bill,

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<sup>29</sup> “Pacific Railroad: The Senate Committee’s Report in Favor of Whitney’s Plan,” *The American Whig Review*, NY, Vol. 6, Iss. 5, (November 1850): 539-547, 541. Italics original.

<sup>30</sup> A.W.D. “The Proposed Railroad to the Pacific,” *The Merchants’ Magazine and Commercial Review*, NY, Vol. 21, Iss. 2. (August 1, 1849), 196.

<sup>31</sup> Hon. J.D. Freeman of Mississippi, “Public Land Policy of the United States,” in the House of Rep., August 13, 1852, 32<sup>nd</sup> Cong. 1<sup>st</sup> Sess. 932.

<sup>32</sup> See *De Bow’s Review* between 1852 and 1854.

which was nicknamed the Gwin Bill. In a speech in April of 1854, Senator Gwin used the framing established by Whitney, De Bow, and Benton, to drum up support. “The trade of India, centuries before the Christian era,” Gwin instructed his fellow Senators, “had attracted the attention of the nations of the earth... and imparted its enriching... influences on those that enjoyed it.” He then embarked on a grand history of global trade, which was first confined to the region around the Tigris and Euphrates rivers before expanding in the Roman era to include the Mediterranean Sea and the Indian Ocean. Gwin then traced the successive European nations who captured Eastern trade since the fifteenth century, including the Genoans, Venetians, Portuguese, Dutch, and finally the English. “The wealth which she [the East] has poured in upon the British Isles,” Gwin asserted, “is beyond estimate.”<sup>33</sup> But the channels of trade were destined to shift once more. “Our recent acquisitions of the Pacific have revolutionized our commercial relations with the world,” Gwin proclaimed.<sup>34</sup> Only the transcontinental railroad was required to fulfill this final movement and allow the United States to overtake Great Britain as the globe’s commercial center. “It is a question between London and New York, between Calcutta and San Francisco, between England and America,” Gwin declared. With the rail completed, “the trade of Asia and the Indies will pass over it through the center of the North American continent” on its way to Europe. Thus, situated in the middle of global trade routes, “the question of maritime ascendancy will no longer be in doubt” and the United States will assume its destined global hegemony.<sup>35</sup>

Despite Gwin’s passionate support for the bill, it floundered in 1854. While the multiple routes proposed in the bill were designed to garner the support of the various sectional factions,

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<sup>33</sup> Senator William Gwin, *Congressional Globe*, 33<sup>rd</sup> Cong., 1<sup>st</sup> Sess., April 10<sup>th</sup>, 1854, 876-883, 880.

<sup>34</sup> *Ibid.*, 881.

<sup>35</sup> *Ibid.*, 882.



it proved too grand for many in Congress. Senator Lewis Cass, the influential Michigan Democrat, grumbled that the plan “is entirely too magnificent for me.”<sup>36</sup> Others complained that many of the trunk lines would prove redundant and thus wasteful, as the Mississippi River already provided an adequate route for trade traveling between the north and the south.<sup>37</sup> Shortly after the bill failed, an amendment added for a northern route couldn’t even reach a vote. Between 1854 and 1860 various attempts were made to renew interest, but no bill was able to garner even nominal support. In this sense, the transcontinental railroad was a casualty of the divisive and increasingly violent sectional conflict that was tearing the nation apart in the 1850s. It was not until northern Republicans gained control of Congress following the secession of southern states in the winter of 1860-61 that a transcontinental railroad bill would be passed in May of 1862.

The significance of the railroad debate in the 1850s should not be measured by the success or failure of the project itself, but instead by the following point: despite deep sectional divisions in Congress over the exact route of the railroad, there was a broad consensus between both Whigs and Democrats over the necessity of the project. Members of both parties, as well as both the northern and southern press, used a similar framework in calling for the United States to embrace the processes of global integration that was transforming the world around them. Both sides interpreted the linking of the Atlantic and Pacific coasts by a railroad as the culmination of a grand historical process through which global commercial hegemony would move west one final time from Great Britain to the United States. By reimagining their nation at the center of an increasingly interconnected global commercial system, supporters of the transcontinental railroad introduced new ways of thinking about the United States in the world.

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<sup>36</sup> Lewis Cass, *Congressional Globe*, 32 Cong., 2 Sess., 285.

<sup>37</sup> This debate is discussed in Russel, *Improvement of Communication*, 97-99.

Perhaps most importantly, this reimagining of the United States' place in the world, both geographically and geo-politically, moved far beyond specific conversations and debates about the transcontinental railroad to animate a wide array of foreign policy initiatives in the 1850s, as Americans on both sides of the aisle called on the United States to take a new, more robust stance in the world. Indeed, at the conclusion of his speech in support of his transcontinental railroad bill in April of 1854, Senator Gwin pointed to “the importance of the Sandwich Islands... placed as they are, between California... Russian America, and the numerous archipelagoes of the great ocean of Asia.”<sup>38</sup> Similarly, in a speech supporting the transcontinental railroad, Representative V.E. Howard of Texas called on Congress to fund other initiatives to further secure the nation's new place in the world. “The United States are situated in the center of the world's commerce and production,” Howard cheered. But he also warned that, “if this country does not bestir itself, our fine natural advantages will be superseded and thrown in the background.” To secure these advantages, Howard called for a “line of steamers from Liverpool to New York and China, in connection with an overland railroad to the Pacific,” as well as an “increase in our steam navy [sic].”<sup>39</sup> As they thought about the United States as a centrally located commercial hegemon, Americans increasingly turned their gazes away from both the continent and the Atlantic and Europe, and instead looked outward towards the Pacific.

### The United States in the Pacific in the 1850s

During the 1850s, politicians and the press joined Howard's call for a more substantial American presence in the world's oceans. Interest in the Pacific was particularly heightened as the potential of an expanded trade with Asia seemed boundless. As Secretary of the Treasury

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<sup>38</sup> Gwin, *Congressional Globe*, 882.

<sup>39</sup> Howard, “Pacific Railroad—Collins Steamers,” 777-779.

Robert J. Walker observed in 1848, “Asia has suddenly become our neighbor with a placid, intervening ocean inviting our steamships upon the track of a commerce greater than that of all Europe combined.”<sup>40</sup> Edward T. Perkins, a sailor who whaled his way around the north Pacific, captured the mood of the nation perfectly in a travel narrative published in 1854. “At no period of our national existence,” Perkins observed, “have American interests been so prominently manifest in the great Western Ocean.”<sup>41</sup> During the long 1850s, two factors converged that gave rise to this new interest in the Pacific: the dramatic expansion of trade with Asia and the growing perception that the United States was at the cusp of wresting global commercial supremacy from Great Britain. The convergence of these two factors propelled a host of policies that expanded the United States’ position in that “great Western Ocean.”

In December of 1853, *De Bow’s Review* published an article on the Taiping Rebellion, the Chinese civil war that was tearing the empire apart in the 1850s. Entitled “China and the Indies; our Manifest Destiny in the East,” the article urged Americans to take advantage of the commercial opportunities Chinese instability produced. “The United States cannot be indifferent to this conflict,” De Bow warned.<sup>42</sup> He then retold the romantic history popularized in the transcontinental railroad debates that depicted the movement of Asian trade from Greece to Rome, then to Venice, Portugal, and finally Great Britain. Using the new understanding of the United States’ central geographical position, De Bow reminded his readers that “we are thousands of miles nearer to China than England is.”<sup>43</sup> This location, and the destabilization caused by the Taiping Rebellion, offered a grand opportunity, in De Bow’s reading, to both

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<sup>40</sup> Walker quoted in David M. Pletcher, *The Diplomacy of Involvement: American Economic Expansion across the Pacific, 1784-1900*, (Columbia: University of Missouri Press, 2001), 31.

<sup>41</sup> Edward T. Perkins, *Na Motu, or Reef Rovings in the South Seas*, (NY: Pudney & Russell, Publishers, 1854), v.

<sup>42</sup> *De Bow’s Review*, “China and the Indies; Our Manifest Destiny in the East,” Vol. 15, Iss. 6, (December 1854), 541-571, 542, accessed April 22, 2018, <https://quod-lib-umich-edu.ezproxy.lib.usf.edu/m/moajrnl/browse.journals/debo.html>.

<sup>43</sup> *Ibid.*, 562.

secure a greater share of the historically enriching Chinese trade and challenge the commercial hegemony of Great Britain. “Let us ponder these plain facts,” De Bow reflected, “to profit by the opening which the Chinese revolution may produce, and advance more boldly with our wares and fabrics.”<sup>44</sup>

Indeed, American merchants were boldly advancing even as De Bow wrote, as the 1850s witnessed a dramatic expansion in trade with China. While enterprising northeastern merchants pursued Asian commerce beginning with the *Empress of China* in 1783, the nearly simultaneous opening of China following the first opium war and the acquisition of the Pacific coastline added a new impetus to the trade. The Treaty of Wang-shia, signed between the United States and China in 1844, opened numerous Chinese ports and guaranteed American merchants more security in pursuing the trade, while the sudden reimagining of the United States as the center of a global commercial system further encouraged Chinese commerce. Between 1845 and 1860, American-Chinese trade increased from approximately \$9.5 million to \$22.5 million. American ships in Chinese ports rose from twenty-seven to eighty-two vessels during the same period.<sup>45</sup> While still behind Great Britain, it was larger than most other European nations and, perhaps more importantly, was interpreted by contemporary Americans to be a key element of the United States’ growing commercial power during the period. Just two years after encouraging his fellow Americans to “advance more boldly” into Chinese markets, De Bow announced, “Since the settlement of California the commerce between the United States and China has been more than doubled.”<sup>46</sup> *The Merchant’s Magazine and Commercial Review* echoed De Bow’s applause in

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<sup>44</sup> Ibid., 571.

<sup>45</sup> Pletcher, *The Diplomacy of Involvement*, 99.

<sup>46</sup> *De Bow’s Review*, “Commerce of the Pacific: The San Francisco and Shanghae [sic] Mail Steamship Line,” Vol. 19, Iss. 4, (October 1855):458-462, 458, accessed April 12, 2018, <https://quod-lib-umich-edu.ezproxy.lib.usf.edu/m/moajrnl/browse.journals/debo.html>.

“East India and Pacific Trade of the United States,” published in 1852, and celebrated that commerce in the region “has expanded more than ever.”<sup>47</sup>

Along with a rapidly expanding trade with Asia, the sense of competition with Great Britain permeated discussions and debates around expanding the American presence in the Pacific during the period. New York Senator William H. Seward defined the nature of this competition in a speech to the Senate in 1852. “The field of battle is chosen not by us,” Seward asserted, “but by the enemy.” He went on to list the size of the British navy, which was “completing a vast web of ocean steam navigation.” Americans must embrace this “contest for the ultimate empire of the ocean” by building a larger navy and more aggressively pursuing foreign commerce. While “I do not know that we shall prevail in that conflict... we are equal to the contest of the supremacy of the seas.”<sup>48</sup> An article published in 1851 in the *Philadelphia North America* entitled “The Empire of the Seas” contended, “It is very certain that a struggle for commercial supremacy is going on.” The “rapid growth of American steam navigation...have produced no little alarm among the patriots of the fast-anchored isle [Great Britain], who dread the transference of the empire of the seas... to the hands of their enterprising cousins of the new world.”<sup>49</sup>

De Bow traced the seeming inevitability of this “transference” through statistics in “The Shipping of the World,” published in July of 1855. “It is curious, first, to notice to how large an extent Great Britain and the United States have monopolized the carrying trade,” De Bow began.

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<sup>47</sup> *The Merchant's Magazine and Commercial Review*, “East India and the Pacific Trade of the United States,” (February 1, 1853), 367, accessed April 5, 2018, <https://search-proquest-com.ezproxy.lib.usf.edu/publication/24442>.

<sup>48</sup> William H. Seward, “American Steam Navigation,” April 27, 1852, Speeches in the U.S. Senate, *The Works of William H. Seward*, eds. George. E. Baker, Vol. 1, Boston: Houghton, Mifflin and Company, 1887.

<sup>49</sup> “Empire of the Seas,” *Philadelphia North America*, contained in *The Supremacy of the Seas, or Facts, Views, Statements, an Opinions Relating to the American & British Steamers Between the United States and Liverpool*, (Washington: Gideon and Co., 1851), 12, accessed March 27, 2018, [https://books.google.com/books?id=etkxhtj2vfMC&pg=PA3&source=gbs\\_toc\\_r&cad=3#v=onepage&q&f=false](https://books.google.com/books?id=etkxhtj2vfMC&pg=PA3&source=gbs_toc_r&cad=3#v=onepage&q&f=false).

According to the southern statistician, “the total floating tonnage of the whole civilized world... consists of about 136,000 vessels of 14,500,000 tons... Of this tonnage, 9,768,172 belong to Great Britain and the United States.” According to De Bow, “Even France, which comes next in the scale, is insignificant in comparison.” De Bow then noted “how nearly our own country has approached Great Britain in the commercial supremacy of the seas,” before proclaiming, “how certain is the fact that in a short time she will have outstripped her.”<sup>50</sup> *The Merchant’s Magazine and Commercial Review* urged Americans to embrace this competition. “It is time for American capitalists to be on the move,” *The Review* warned, “or England and the English will draw the immense prize which should belong to the first comer.”<sup>51</sup>

Indeed, the United States’ merchant marine did equal Great Britain’s by the end of the decade, and trade grew at a staggering rate. Between 1849 and 1860 total foreign trade increased by 144 percent from a value of \$281,557,371 to a value of \$687,192,176. Total tonnage cleared in American ports skyrocketed from 5,412,045 to 12,087,200.<sup>52</sup> While it is tempting to underestimate the importance of this large presence on the world’s oceans or rapid increase of trade when compared to later periods of American history, to do so overlooks how it was experienced and celebrated by Americans at the time. Indeed, this moment of intense commercial rivalry between Great Britain is often overlooked in histories of the 1850s, partially because of the sharp decline of the United States’ merchant marine during the Civil War, as insurance prices skyrocketed and naval blockades stifled the flow of goods.<sup>53</sup> Furthermore, the

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<sup>50</sup> *De Bow’s Review*, “The Shipping of the World,” Vol. 19, Iss. 1, (July 1855): 79-81, 79, accessed April 12, 2018, <https://quod-lib-umich-edu.ezproxy.lib.usf.edu/m/oaajrnl/browse.journals/debo.html>.

<sup>51</sup> *The Merchant’s Magazine and Commercial Review*, “Free Navigation of the River Parana and its Tributaries,” (February 1852): 147-155, 155, accessed April 12, 2018, <https://search-proquest-com.ezproxy.lib.usf.edu/publication/24442>.

<sup>52</sup> Schroeder, *Shaping a Maritime Empire: The Commercial and Diplomatic Role of the American Navy, 1829-1861*, (Westport: Greenwood Press, 1985), 91.

<sup>53</sup> For the Yankee and Confederate Navies during the Civil War, see Kenneth J. Hagan, *In Peace and War; Interpretations of American Naval History, 1776-1984*, (Westport, CT: Greenwood Press, 1984), chapters 6 and 7.

British, who filled in the gap created in the 1860s, would maintain their commercial marine hegemony well into the early twentieth century. Thus, it is tempting to project this British commercial supremacy back on the entire nineteenth century. Yet doing so overlooks how Americans perceived the world around them and their place in it during the 1850s. Rather than seeing themselves as a minor player in the larger commercial world, as they had done through much of the early nineteenth century, Americans witnessed what they interpreted as an explosion of trade and an intense commercial rivalry with Great Britain that demanded a more animated presence of the United States in the world's oceans, especially the Pacific.

A crucial element of this increased presence involved the enlargement of the American navy, a policy supported by elements of both the Whig and Democratic parties in the 1850s. In an article published in March of 1852, *The American Whig Review* highlighted the global commercial competition with Great Britain before attempting to articulate the new vision Americans were acquiring. "His imagination is expansive, his calculation by millions, his estimate of space by seas and continents," the *Review* exclaimed. "His mine is California; his tea-garden, China; his trade, the world's commerce; his customer, the want of all nations. He views all sides of the globe at once, and encircles it with his ships."<sup>54</sup> The Democratic *Southern Literary Messenger* concurred, demanding, "We must become a great naval power as well as a great commercial people."<sup>55</sup> And like De Bow in his article "China and the Indies; Our Manifest Destiny in the East," *The Daily Cleveland Herald* worked to expand the geographic scope of manifest destiny from the continent to the world's oceans, remarking in 1853, "Manifest destiny has hitherto had an eye chiefly on the dry land; it now enlarges the scope of its vision, and takes

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<sup>54</sup> "Nicaragua," *The American Whig Review*, 257.

<sup>55</sup>"Our Foreign Policy," *Southern Literary Messenger*, 1.

in the seas.”<sup>56</sup> These calls in the nation’s press were reflected in political measures taken in Washington, D.C., as both Whigs and Democrats supported expanding the American navy in the 1850s.

In his annual report of 1852, John P. Kennedy, a moderate Whig from Maryland and Secretary of the Navy under President Fillmore, told Congress the “rapid extension of our domain...and the establishment of new lines of commerce on the Pacific” made it an “absolute necessity” to increase the size of the nation’s navy.<sup>57</sup> While Congress failed to act during the lame duck session that followed the election of 1852, the incoming administration of Democrat Franklin Pierce reintroduced Kennedy’s naval recommendations. Pierce appointed James C. Dobbin, a North Carolina Democrat and ardent naval-expansionist, as his Secretary of the Navy. In his annual report of 1853, Dobbin highlighted the suddenness in which the United States found itself at the center of global trade. “A new empire, has, as by magic, sprung into existence,” Dobbin exclaimed. “San Francisco promises, at no distant day, to become another New York, and our prosperous trade in the Pacific, [promises] to bear the same relationship to China and Japan which that of the Atlantic coast bears to the continent of Europe and Great Britain.”<sup>58</sup> Thus perched between the Europe and Asia, the United States desperately required an expanded navy to protect trade and solidify the ordained place of San Francisco as the American entrepot of the Pacific.

In the Fall of 1853 Dobbin pushed forward a bill calling for the construction of six steam frigates and the completion of two more upon which construction had ceased. The bill easily passed the Senate and the House took up the bill to debate in early 1854. Thomas S. Boccock, a

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<sup>56</sup> *The Daily Cleveland Herald*, “The Sandwich Islands,” (November 18, 1853), 278.

<sup>57</sup> Kennedy quoted in Schroeder, *Shaping a Maritime Empire*, 97.

<sup>58</sup> R. W. Van Alstyne, *The Rising American Empire*, (Oxford: Basil Blackwell, 1960), 132.



Democrat from Virginia and chairman of the Naval Affairs Committee, highlighted the dual threads of increased trade and British commercial rivalry in a speech supporting the bill. Bocoock began by noting prominent changes that transformed the nation in the preceding ten years. Since 1844, “we have acquired exclusive possession of Oregon, annexed Texas, and acquired California, and have thus added more than two thousand miles to our coast.” After presenting numerous tables that compared American commerce between 1844 and 1854, Bocoock noted “that our imports and exports and have increased since then more than one hundred per cent., and our tonnage about one hundred per cent.” Yet, despite these changes, Bocoock lamented, “our Navy, instead of being proportionately increased has actually decreased... Is not this statement one whose force it is impossible to resist,” he asked his fellow Representatives. “We must make up our mind,” Bocoock demanded, “to submit gracefully or oppose manfully the British.”<sup>59</sup>

Bocoock’s arguments for an expanded U.S. naval presence abroad succeeded—the bill easily passed the House with a vote of 112 to 43. Southern Democrats and Northeastern Whigs overwhelmingly supported the bill, while Westerners of both parties tended to dissent.<sup>60</sup> This bipartisan support was notable, especially considering the same session witnessed vociferous and acrimonious debates inspired by the sectionally divisive Kansas-Nebraska Act. Similar to conversations surrounding the Transcontinental Railroad, northerners and southerners could agree that the new central position of the United States and the vast commercial extension they witnessed around them demanded an expanded role of the United States in the world. Congress passed a further naval expansion bill authorizing the construction of five shallow-draft steam

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<sup>59</sup> Speech of Hon. Thomas S. Bocoock, Chairman of the Naval Affairs Committee, March 28, 1854, *Congressional Globe*, 33 Cong., 1 Sess., Appendix, 422-425.

<sup>60</sup> Harold and Margaret Sprout, *The Rise of American Naval Power, 1776-1918*, (Princeton: Princeton University Press, 1939), 426.

sloops-of-war in December of 1856.<sup>61</sup> By the end of the decade the American navy was at its largest-ever peacetime level.<sup>62</sup> Between the newly expanded navy and the merchant marine, by the end of the 1850s the United States had more boats in the ocean than ever before, and far more than any nation except Great Britain.

The growing presence of the United States in the Pacific heightened interest in a Central American canal, which would expedite immigration to California and trade with Asia by cutting the arduous sea journey between the east coast of the United States and the Pacific in half. While American statesmen had acknowledged the desirability for an interoceanic canal since the early nineteenth century, little progress was made until the acquisition of the Pacific coastline in 1848. In 1849, Secretary of State John Clayton appointed Ephraim George Squier, an ardent Whig supporter with a background in archeology and civil engineering, to the position of *chargé d'affaires* of the region. Squier was to negotiate treaties that secured American rights to build and operate a canal with the various Central American states, especially Nicaragua, which seemed at the time to control the most viable route. While Squier spent only thirteen months in the region, he provided valuable information to Secretary Clayton, who successfully negotiated the Clayton-Bulwer treaty with Great Britain in the Spring of 1850. Squier was replaced shortly after the ratification of the treaty, as the sudden death of President Taylor led to the replacement of the entire cabinet following the ascension of President Fillmore.

Upon his return to the United States, Squier began to promote an interoceanic railroad across Honduras. By 1852 he had enough financial backing, including significant contributions from former Treasury Secretary Robert J. Walker and Commodore Robert F. Stockton, to lead a

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<sup>61</sup> See *Congressional Globe*, 34 Cong., 3 Sess., 1067

<sup>62</sup> Matthew Karp, *This Vast Southern Empire: Slaveholders at the Helm of American Foreign Policy*, (Cambridge: Harvard University Press, 2016), 201.

small expedition of six men, including three U.S. military engineers, to the region to negotiate with the government of Honduras and explore the feasibility of the route.<sup>63</sup> Shortly thereafter, Squier began publishing a series of works that would later be collected into a book to drum up interest in Central America and popularize the need for more efficient interoceanic travel in the region.<sup>64</sup> In this sense, Squier was a sort of Central American Asa Whitney. Both men hoped to become rich overseeing the construction of a transcontinental railroad, and both men published works popularizing their cause. And like Whitney before him, Squier adopted a similar framework to imbue his project with global significance. “Our trim-built fairies of the deep dance over either ocean,” Squier celebrated, and “sweep in the trade of Europe on the one hand, and on the other bring to the mouth of Sacramento the treasures of the Oriental world.” Centrally located between Europe and Asia, the United States just needed to embrace its position in order “to gird the world as with a hoop.”<sup>65</sup> Interoceanic travel that was financed and controlled by the United States government and American entrepreneurs, like the railroad Squier hoped to construct across Honduras, would lead “surely and irrevocably to American predominance in the Pacific.”<sup>66</sup> Echoing discussions surrounding the enlargement of the navy, Squier also highlighted the explosive growth of American trade and commercial competition with Great Britain. After comparing shipping tonnage between the two nations in 1830 and 1850, Squier predicted, “In 1860, the United States will be the first maritime nation of the globe—the greatest the world has ever seen.”<sup>67</sup> Squier pointed to the power grand “future destiny” that would inevitably result.<sup>68</sup>

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<sup>63</sup> Charles Lee Stansifer, *The Central American Career of E. George Squier*, Ph.D. Dissertation, Tulane University, 1959, 90-91, accessed March 22, 2018, [file:///C:/Users/jstay/Downloads/Stansifer\\_1959.pdf](file:///C:/Users/jstay/Downloads/Stansifer_1959.pdf).

<sup>64</sup> The first of the series was reviewed by *The Merchants' Magazine and Commercial Review* in March, 1852, but the full-length book was not published until 1856.

<sup>65</sup> E.G. Squier, *Nicaragua; Its People, Scenery, Monuments, and the Proposed Interoceanic Canal*, New York, Appleton & Co., 1856, 8.

<sup>66</sup> *Ibid.*, 283.

<sup>67</sup> *Ibid.*, 287.

<sup>68</sup> *Ibid.*, 283.

Like Whitney, Squier zoomed way out of his specific infrastructure project to construct a larger framework for understanding its significance. The imagery of a hoop binding the world together around a centrally located United States encapsulates how many Americans were beginning to perceive the world during this period. As Henry Howe, a popular author and historian from Connecticut, proclaimed in a compendium of travel narratives published in 1856, “The whole world are now near neighbors.”<sup>69</sup> Rather than simply expediting travel between the Atlantic and Pacific, the construction of Squier’s railroad would solidify the United States’ position in the world and hasten the fulfillment of its “future destiny.” While Squier’s project to construct a railroad across Honduras ultimately fell through, the attempt, and more importantly the language used to frame it, offered yet another interesting window into how Americans perceived the relationship between themselves and the world in the 1850s.

#### Talking About Exploring Expeditions in the 1850s

Another key element of the United States’ increasing presence in the world’s oceans was a flurry of exploring expeditions initiated in the early 1850s. While Southern Democrats under the Pierce administration led the push for expanding the Navy, it was Whig administration of President Millard Fillmore (1850-1853) that initiated more exploring expeditions than any other in American history. While small missions were sent to the Arctic and Africa, major expeditions were dispatched to chart and explore the northeastern Pacific Ocean, reconnoiter the Amazon river basin, and survey the tributaries of the Rio de la Plata.<sup>70</sup> These missions produced both a wealth of scientific data and numerous travel narratives that exposed American intellectuals and the public to the wider world. They also represent an important outward thrust as the American

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<sup>69</sup> Howe, *The Travels*, iii.

<sup>70</sup> Schroeder, *Shaping a Maritime Empire*, 103.

navy was employed to further the nation's commercial diplomacy around the world. As *The Weekly Herald*, a daily out of New York, celebrated in January of 1853, "There is nothing for which the United States is more distinguished... than these exploring expeditions, partly scientific and partly commercial, bearing around the globe the star-spangled banner." It went on to applaud "the intense mental activity of the American people" and "their 'manifest destiny' to overspread the earth."<sup>71</sup> Like De Bow in his "Our Manifest Destiny in the East," *The Weekly Herald* extended the geography of "manifest destiny" from the continental United States to the entire world.

Lieutenant Mathew F. Maury, the Superintendent of the Naval Observatory under President Fillmore, was a critical backer and manager of the naval exploring expeditions of the period.<sup>72</sup> Unlike Fillmore, Maury was a southerner and strong exponent of Southern slavery. Indeed, like many antebellum southerners, Maury look forward to the day when plantation owners could export their version of slavery to the shores of Brazil and Central America. This thought almost certainly crossed his mind when he proposed the naval expedition to survey the Amazon river basin in early 1851.<sup>73</sup> Yet speaking on February 16, 1854 before the annual meeting of the American Geographical and Statistical Society, an organization of wealthy New York merchants and philanthropists, Maury downplayed his southern sympathies and instead emphasized a nationalist vision of American expansion. Indeed, in discussing the expedition to Brazil, Maury failed to mention slavery at all. "To the glory of the Republic," Maury proudly announced, "no moves by the State are hailed with more enthusiasm by the popular voice than those which have for their official object the opening... of new fields of commercial enterprise."

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<sup>71</sup> *The Weekly Herald*, "Important Exploring Expeditions from the United States," New York, Iss. 4, (January 22, 1853), 29.

<sup>72</sup> Schroeder, *Shaping a Maritime Empire*, 104.

<sup>73</sup> See Karp, *A Vast Southern Empire*, 36.

He went on to celebrate the increasing presence of Americans in Chile, Argentina, and Nicaragua, before turning to the exploratory expedition of the northeastern Pacific. “That is the largest surveying squadron now afloat under any flag. And never has any nation sent forth an expedition in the cause of science better fitted and found than that is,” Maury crowed. He went on to call for “the exploration of the valley of the Amour in Mantchouria [sic],” before proudly claiming that “few countries have ever at any time been able to boast of more activity in this department.”<sup>74</sup>

In 1854, notably, a southerner and ardent slavery apologist had delivered the keynote address to a group of wealthy northern merchants in a posh New York banquet hall. In celebrating the numerous expeditions of the U.S. Navy, Maury downplayed his pro-slavery views and instead emphasized the “glory of the Republic” and the future commercial expansion of the United States. While the audience and the speaker assuredly held radically different views on what “new fields of commercial enterprise” should look like, they could nonetheless cheer the outward thrust of the United States in the 1850s. George Bancroft, the renowned historian and politician, echoed Maury’s nationalism in a speech delivered in the same city just a few months later. Speaking before the New York Historical Society at the fashionable Astor House in November of 1854, Bancroft celebrated how “geographical research has penetrated nearly every part of the world, revealed the paths of the ocean, and chronicled even the varying courses of the winds.” Like Maury, Bancroft then boasted, “In this great work our country holds the noblest

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<sup>74</sup> Annual Address, by M.F. Maury, L.L.D., Lieut. U.S.N. at the Annual Meeting of the American Geographical and Statistical Society, February 16<sup>th</sup>, 1854, accessed March 22, 2018, [https://books.google.com/books?id=eufAAAAMAAJ&pg=RA1-PA15&lpg=RA1-PA15&dq=commodore+perry+at+american+geographical+and+statistical+society+new+york&source=bl&ots=vUICdAhFsd&sig=BgxtsXwj-aDfc-nTaPjBVRqbpSQ&hl=en&sa=X&ved=0ahUKewihg46d\\_O7YAhUDXIMKHb9ZBvAQ6AEILDAC#v=onepage&q=commodore%20perry%20at%20american%20geographical%20and%20statistical%20society%20new%20york&f=false](https://books.google.com/books?id=eufAAAAMAAJ&pg=RA1-PA15&lpg=RA1-PA15&dq=commodore+perry+at+american+geographical+and+statistical+society+new+york&source=bl&ots=vUICdAhFsd&sig=BgxtsXwj-aDfc-nTaPjBVRqbpSQ&hl=en&sa=X&ved=0ahUKewihg46d_O7YAhUDXIMKHb9ZBvAQ6AEILDAC#v=onepage&q=commodore%20perry%20at%20american%20geographical%20and%20statistical%20society%20new%20york&f=false)

rank.”<sup>75</sup> Both men carefully avoided any references to the sectionalism that was beginning to tear the nation apart and instead emphasized the national honor and international prestige the United States gained through exploring expeditions.

Two of the staunchest supporters of the North Pacific Exploring and Surveying Expedition, were Democratic Senator William Gwin of California and Whig (and later Republican) Senator William Seward of New York. While the two Senators had complementary visions of the importance of the Pacific and the desirability of a vastly expanded role for the United States in the region, they were on the opposite side of the great domestic divide over the question of slavery. Seward was a leading Whig and loud opponent of slavery, while Gwin was a native Mississippian who maintained a plantation in that state throughout the 1850s. While Seward would oversee the foreign policy of the Union as Secretary of State when the Civil War broke out in 1861, Gwin returned to his southern plantation to produce material for the Confederacy.<sup>76</sup>

As we have seen, Senator Gwin was an adamant proponent of the transcontinental railroad, and though his compromise bill with six terminus points ultimately failed in 1854, he relentlessly pushed throughout the decade to further the United States’ role in the Pacific. During debates surrounding the Naval Appropriations Bill of 1852, Gwin, who was Chairman of Naval Affairs from 1851 to 1855, introduced an amendment “for prosecuting a survey and reconnaissance for naval and commercial purposes... frequented by American whale ships, and by trading vessels.”<sup>77</sup> Though he ostensibly proposed this project to reduce the number of

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<sup>75</sup> George Bancroft, “The Necessity, the Reality, and the Promise of the Progress of the Human Race,” Oration delivered before the New York Historical Society, Nov. 20, 1854, 28, accessed March 22, 2018, <https://babel.hathitrust.org/cgi/pt?id=hvd.hnjcwk;view=1up;seq=5>.

<sup>76</sup> On Gwin, see Karp, *This Vast Southern Empire*, 200.

<sup>77</sup> Senator William Gwin, *Congressional Globe*, 32 Cong., 1 Sess., August 30, 1852, 2452.

shipwrecks in the northwest Pacific, Gwin surely had additional motives. While the survey would benefit Gwin's home state of California in the long run as whaling and trade became safer, Gwin also had connections to the Russian-American Company, a corporation that shipped furs and ice between California and present-day Alaska, which was then called Russian-America. Gwin's proposed survey would secure American, as well as the Russian-American Company's, interest in the region.<sup>78</sup>

Gwin found an unlikely ally across the aisle in William Seward, who spoke in favor of the amendment on July 29, 1852. He began by outlining the practical reasons which demanded the Pacific survey. After highlighting the "many and deplorable losses [that] were sustained by the fleets of 1840-'50," Seward asserted many of the "disasters might have been avoided had there been charts accurately indicating the shoals and headlands, and also places of sheltered anchorage near them."<sup>79</sup> But Seward quickly zoomed out to paint a larger picture of global events. "The Pacific Ocean, its shores, its islands, and the vast regions beyond, will become the chief theatre of events in the world's great hereafter," Seward proclaimed. As the gravity of importance shifts away from "the Atlantic world, the better passions of mankind will soon have their development in the new theatre of human activity. Commerce," Seward continued, "is the great agent of this movement."<sup>80</sup> As proponents of an expanded navy would do throughout the 1850s, Seward also pointed to the dual threads of expanded commerce with Asia and British commercial competition. "Will you leave this survey and its benefits to England?" Seward asked. "Sir, have you looked recently at the China trade?"<sup>81</sup> In this telling, the surveying

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<sup>78</sup> For Gwin's relationship with Alaska and the Russian-American Company, see Hallie M. McPherson, "The Interest of William McKendree Gwin in the Purchase of Alaska, 1854-1861," *Pacific Historical Review*, 3, no. 1 (1934): 28-38.

<sup>79</sup> Seward, "Survey of the Arctic and Pacific Oceans, July 29, 1852, in Baker eds., *The Works of William H. Seward*, 245.

<sup>80</sup> *Ibid.*, 250.

<sup>81</sup> *Ibid.*, 247.



expedition to the Pacific was about much more than simply charting safe harbors and dangerous reefs. It became an integral element of solidifying the United States' position in the shifting currents of macro-historical processes. In a world of vastly increasing trade with Asia and intense commercial rivalry with Great Britain, the United States should embrace a new and expanded role in the world and harness the natural processes of historical change that were destined to reshape the commercial world.

With Seward leading the northeastern Whigs in support, Gwin's amendment survived and successfully went into effect with the passage of the Naval Appropriations Bill in August of 1852, and the surveying expedition it funded reconoured the North Pacific between 1853 to 1856. Like Maury and his audience of wealthy New York merchants, Gwin and Seward would vehemently disagree on the exact character of the United States' presence in its expanded role in the world, but they could nonetheless agree that this expanded role was necessary. Like the debates surrounding the transcontinental railroad, measures to enlarge the United States navy or send exploring expeditions to all corners of the globe were based on a new appreciation of the power and place of the United States in the world that emerged during the 1850s.

“You Shall Sit in the Middle, Thousands of Years”

At an address before the Phi Beta Kappa Society of Yale College in the summer of 1854, William Seward directed the upcoming generation of Americans to visualize the United States' position in the world. “Trace on a map the early boundaries of the United States, as they were defined by the treaty of Versailles, in 1783,” he instructed. After highlighting the efforts of Great Britain and Spain to restrain the young country, Seward admitted, “Were not the Europeans

astute in thus confining the United States?”<sup>82</sup> But their efforts were for naught. American ingenuity could not be contained, as demonstrated in the Louisiana Purchase, the proliferation of internal improvements, and the recent territorial gains from Mexico. “Thus in sixty-five years after the peace of Versailles,” Seward proclaimed, “the United States advanced from the Mississippi, and occupied a line stretching through eighteen degrees of latitude on the Pacific coast.” No longer “a mere Atlantic nation,” the United States enjoyed “ocean navigation on either side, and [bore] equal and similar relations to the eastern and to the western coast of the old world.”<sup>83</sup> This reimagining of the United States at the center of an increasingly interconnected world went beyond political debates about infrastructure projects and naval expansion to inform how Americans thought of themselves and their place in the world in the 1850s. Seward called on these young Americans—as he had his fellow politicians in the halls of Congress—to take on a new, more assertive identity that celebrated and embraced the United States’ recently discovered central position.

Henry Howe, one of the most well-known and successful historians of the period, recorded an American saying that encapsulated this new identity and national self-confidence: “We can put the Atlantic in one pocket, and the Pacific in another, and reduce the universe to nowhere and a spot of grease.” According to Howe, he repeatedly encountered this phrase while traveling through the country during the late 1850s interviewing Americans and compiling resources for a travel narrative. While Howe admitted the “national braggardism” exemplified in the saying was “disagreeable in individuals,” he contended that such a confident attitude was “formidable and respectable when viewed as characteristic of a people in the aggregate.”<sup>84</sup>

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<sup>82</sup> Seward, “The Physical, Moral, and Intellectual Development of the American People,” in Baker eds., *The Works of Seward*, 160 and 163.

<sup>83</sup> *Ibid.*, 165

<sup>84</sup> Recorded in Howe, *Adventures*, 565.

Indeed, the work in which Howe recorded the saying was itself representative of this new attitude. Entitled *Adventures and Achievements of Americans: A Series of Narratives Illustrating their Heroism, Self-Reliance, Genius and Enterprise* and published in 1859, the book was a six-hundred-page paean to “national braggardism.” In it, Howe recorded the “triumphs” of Americans like Colt, McCormick, and Singer, who crossed the Atlantic to participate in the Crystal Palace exhibition of 1851. He also told of Americans who crossed the Pacific to construct railroads in eastern Russia.<sup>85</sup> Whether or not they could “put the Atlantic in one pocket and the Pacific in another,” during the 1850s Americans celebrated their growing influence across both oceans.

While they might hear Howe’s nationalist bragaddocio on the streets of Philadelphia or Baltimore, American’s could be exposed to new ways to think about the United States in the world through more highbrow mediums, as well. Indeed, one of the most famous poets of the period, Walt Whitman, composed a few verses in June of 1860 that celebrated the newly discovered central position of the United States in the world. Whitman was inspired while attending a parade in his home town of New York City. In the midst of a fiercely contested presidential election that would ultimately tear the nation apart, a Japanese legation of diplomats arrived in the United States to formally sign the Treaty of Kanagawa negotiated six summers earlier during Commodore Mathew Perry’s expedition. If the local press is to be trusted, over five-hundred thousand people, or half the population of New York, turned out to welcome the delegation.<sup>86</sup> New Yorkers crowded the streets and hung out their windows to witness the

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<sup>85</sup> In *ibid.*, see the section entitled “Achievements of Americans in Russia,” 565-574.

<sup>86</sup> “The Sensation Yesterday: Magnificent Reception of the Japanese Embassy,” *New York Herald*, (June 17, 1860), 1-3.

elaborate military gun salutes and exceptionally large parade, a welcome distraction from the vitriolic politics of the season.<sup>87</sup>

Whitman, who published “The Errand Bearers” less than two weeks after the “magnificent reception,” as the *New York Herald* described the occasion, opened the poem by placing himself in the gigantic mass of onlookers: “When million-footed Manhattan, unpent, descends to its pavements... I too, arising, answering... merge with the crowd.”<sup>88</sup> Recreating the scene, Whitman celebrated how “the round-mouth’d guns, out of the smoke and smell I love, spit their salutes” as the seventy-six Japanese ambassadors arrived. As the poet moved on to describe the guests of honor, though, he reported seeing more, perhaps, than his fellow New Yorkers surrounding him. “I do not know whether others behold what I behold pass,” Whitman admitted, “but I will sing you a song of what I behold.” In Whitman’s vision, while the Japanese hailed from a single nation, they represented the whole of Asia, what he called “the Land of Paradise, the nest of birth, the nest of languages, the bequether of poems.” Thus Whitman perceived “not the tann’d Japanese only—not China only, nor the Mongol only, Lithe and silent, the Hindoo appears—the whole continent appears... All of these, and more, are in the pageant-procession.” Inspired by the vision before him, Whitman celebrated the new power and reach of the United States. “I chant the new empire, greater than any before... I chant America... I chant my sailships [sic] and steamships threading the archipelagoes, I chant my stars and stripes fluttering in the wind,” Whitman proudly proclaimed.

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<sup>87</sup> For a description of the festivities, see Masao Miyoshi, *As We Saw Them: The First Japanese Embassy to the United States, 1860*, (Berkeley and Los Angeles: Univ. of California Press, 1979).

<sup>88</sup> Walt Whitman, “The Errand Bearers,” *The New York Times*, June 27, 1860, 2, accessed on April 5, 2018, <https://whitmanarchive.org/published/periodical/poems/per.00154>. The poem originally appeared in the *New York Times* on June 27, 1860, and appeared in all subsequent versions of *Leaves of Grass* under the revised title “A Broadway Pageant.”

Then, like Asa Whitney eleven years before, Whitman situated the United States at the midpoint of the world. “From one side, the Princes of Asia come to you, as to-morrow, from the other side, the Queen of England sends her eldest son to you.” While Whitman was directly referencing the upcoming arrival of Edward, Prince of Wales and future King of England, who travelled through the United States just a few weeks after the Japanese delegation, his imagery of Asians traveling east across the Pacific and Europeans travelling west across the Atlantic served to geographically center the United States. And like the wise men who travelled so far to greet the birth of Jesus, the nearly simultaneous arrival of distinguished visitors from the east and the west marked the culmination of a grand historical process and the birth of a new era. All of history up to that point was marked by the movement of civilization westward from Asia, according to Whitman, a five-thousand-year process that climaxed in the settlement of the American West. “Were the precedent dim ages debouching westward from Paradise so long? Were the centuries steadily footing it that way, all the while, unknown, for you, for reasons?” The United States’ push into the Pacific and the arrival of the Japanese in New York marked a reversal in this ancient flow. “They shall now be turned the other way also, to travel toward you thence. They shall now also march obediently eastward, for your sake,” Whitman wrote. Furthermore, this reversal marked the birth of a new age in which the world had finally become a tightly knit whole. “The orb is enclosed, the ring is circled, the journey is done,” Whitman explained. And the United States held a special position and a special destiny in this new age. “You shall sit in the middle, thousands of years,” Whitman prophesized.<sup>89</sup> In many ways, Whitman forged in a poetic form a framework for understanding the place of the United States in the world that was first articulated by Asa Whitney during the transcontinental railroad debates

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<sup>89</sup> Ibid., 2.

of the late 1840s and early 1850s. Nearly one hundred years before Henry Luce, Walt Whitman predicted not an American century but an American millennium.

The emergence of a global vision and the belief in the central position of the United States—both geographically and in terms of importance and power—marks an important threshold in the way Americans viewed and talked about themselves in the world. While a high sense of destiny had been an important thread in American self-identity since John Winthrop described the Massachusetts Bay Colony as a “city upon a hill,” the portrayal of the United States as the center of a rapidly integrating global commercial system added a new geographic specificity to the important place the United States occupied in the world. This new understanding animated a wide array of conversations and debates during the 1850s, from transcontinental railroads to exploratory expeditions in the Pacific. Indeed, this new geographic centering became a key talking point when a wide array of Americans—from railroad boosters and Central American diplomats to politicians from both sides of the political aisle—worked to drum up support for a more vigorous American foreign policy. The global dimensions of these conversations were largely overshadowed by more pressing domestic concerns as the Civil War tore the nation apart between 1861 and 1865. It is important to remember, though, that many of the policy objectives that were called for in the 1850s came to fruition in the coming decades, from the completion of the transcontinental railroad and the annexation of Alaska, which both occurred before the end of the 1860s, to an expanded presence in the Pacific and Central America, a presence which steadily grew throughout the rest of the nineteenth century. The emergence of a global vision of the United States in the world during the 1850s would thus serve as a key foundation upon which Americans built a vast global empire by the end of the nineteenth century.

## Conclusion

As the Scottish travel writer and businessman William Baxter considered all he had seen during his six-month journey through the United States in 1853, he contrasted his Old World home with the New World that so amazed him. “Standing on American ground,” Baxter reflected, “I think of the future.”<sup>90</sup> As Baxter noticed, the long 1850s was a watershed period during which many of the trends that would define the United States for the next century-and-a-half first crystallized. Baxter’s observations, though, do not fit neatly into traditional narratives of American history. Historians have been more comfortable to depict the rise of the United States as an abrupt affair. Economic historians Kevin H. O’Rourke and Jeffrey G. Williamson describe an American “leap to industrial dominance after the 1890s,” while the social historian Daniel T. Rodgers asserts the United States “vaulted almost overnight” to its hegemonic position in the early twentieth century.<sup>91</sup> As this dissertation illustrates, however, the rise of the United States as a technological leader and major force in global affairs was not a sudden “leap” that happened “almost overnight” but rather a steady expansion that began to take shape during the long 1850s.

William Baxter was not alone in noticing these changes, as Chapter One demonstrates. As Europeans traveled American cities and visited American factories, they too became convinced the transformations that were reshaping the United States in the mid-nineteenth century demanded attention. Under the rubric of “progress,” they carefully documented population growth, the spread of rail and telegraph lines, and the widespread use of machines.

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<sup>90</sup> William Edward Baxter, *America and the Americans*, (London: Geo Routledge & Co.,1855), 16.

<sup>91</sup> Kevin H. O’ Rourke and Jeffrey G. Williamson, *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, (Cambridge: The MIT Press, 1999), 25, Daniel T. Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age*, (Cambridge: Harvard University Press, 1998), 253.

But these observations were more than an amalgamation of mere statistics. In book after book, these travelers called on their fellow Europeans to pay attention, for as the Russian traveler Aleksandre Lakier predicted, Americans would “spread their influence by the strength of their inventions, their trade, and their industry.”<sup>92</sup>

Their inventions were on display for the world to see at the Crystal Palace in London in the summer of 1851. European visitors echoed the transatlantic travel narratives of the period in drawing attention to the level of mechanization and technical expertise American inventors and engineers exhibited. As Chapter Two recounts, it was events surrounding the Crystal Palace that first drew the British government’s attention. Parliament sent the most renowned engineers of the age to tour American factories and purchase equipment for a new British armory. At the same time, a host of American entrepreneurs brought complex machinery across the Atlantic to set up shop in Great Britain. These dual waves caused by the Crystal Palace mark a major reversal in the flow of mechanical innovations. As European observers recognized, the 1850s marked a transitional period in which the United States began to assume the role of the world’s most technologically innovative nation.

No one embodied this transition more than Samuel Colt. Born in 1814, just a few years after the first textile factories had been established in New England based on the British model, Colt would go on to export his guns and the machinery that made them throughout Europe and the world. Chapter Three offers a window into this eclectic American international businessman and illustrates how the business practices Colt pioneered, like including European testimonials and Latin American imagery in his advertisements, would be built upon American multinationals

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<sup>92</sup> Aleksandre Lakier, Arnold Schrier, and Joyce Story, *A Russian looks at America: the journey of Aleksandr Borisovich Lakier in 1857; translated from the Russian and edited by Arnold Schrier, Joyce Story ; foreword by Henry Steele Commager ; introduction by Arnold Schrier*, (Chicago: University of Chicago Press, 1979), 262.



in the late-nineteenth century. A close look at Colt's life also reminds us that the United States' push out was never a one-sided affair, as evidenced by the Turkish minarets that adorned his Hartford home.

Americans, like their European counterparts, also began to perceive and articulate a new place of the United States in the world during the long 1850s. As Chapter Four demonstrates, American politicians, business boosters, and the commercial press began to reimagine the United States position in the world, from a western appendage of Europe to the center of an ever-tightening global commercial network. These new geographic understandings, in turn, led to calls from both sides of the political aisle for the United States to take a stronger and more assertive stance in the world. Indeed, the 1850s witnessed a flurry of exploratory expeditions and international infrastructure projects, from the opening of Japan to the construction of the Panama railroad, that foreshadowed the expansive American foreign policy of the 1890s.

In focusing on transatlantic travelers and international businessman, this dissertation builds on the burgeoning field of transnational antebellum American history in asserting that the United States cannot be understood by simply looking within its borders. Rather than relatively insular and preoccupied with domestic troubles, many Americans in the 1850s were pushing out into the world in new and innovative ways that foreshadowed the more widely accepted moment of American ascendancy at the turn of the century. Like a host of new economic histories of the period, this dissertation also demands we take seriously the technological innovations and international business practices that make the 1850s a watershed period in American history. While most histories of the industrial revolution focus on Great Britain and portray the United States as a secondary player until the late-nineteenth century, this dissertation illustrates how by the 1850s the United States had already begun to take the lead in

technological innovation. European observers recognized this and Americans celebrated it, as Walt Whitman did when he wrote, “I chant the new empire, greater than any before.”<sup>93</sup>

William Stead may have called it “the trend of the twentieth century.”<sup>94</sup> But in fact, it was during the long 1850s—not the early twentieth century—that Europeans and many others first began to grapple with the Americanization of the world.

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<sup>93</sup> Walt Whitman, “The Errand Bearers,” *The New York Times*, June 27, 1860, 2, accessed on April 5, 2018, <https://whitmanarchive.org/published/periodical/poems/per.00154>.

<sup>94</sup> Stead, William T. *The Americanization of the World; or, The Trend of the Twentieth Century* (New York: H. Marckley, 1901).

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