# The Border Politics of Patents and the Immigrant Inventor

# Kara W. Swanson\*

# Introduction

In the twenty-first-century United States, patents—government grants of exclusive rights to the originator of a new and useful invention—are part of the politics of the border.<sup>1</sup> Patents are relevant to the U.S. border in at least three ways. First, patents, as federal government grants limited in effect to U.S. territory and also the subject of international agreements, are designed to control the flow of ideas and technologies across borders.<sup>2</sup> Second, patents are used to measure the relative success of the U.S. in a global "race" for migrating talent.<sup>3</sup> Third, patents are used as political tools in debates about who is most worthy of becoming American, serving as proxies both for the inventive ability of immigrant groups and the capability of would-be immigrants to assimilate.<sup>4</sup>

<sup>\*</sup> Professor of Law/Affiliate Professor of History, Northeastern University, Boston, MA; B.S. Yale University; M.A./J.D., University of California, Berkeley; Ph.D., Harvard University. For helpful comments, I thank Rachel Rosenbloom, Jonathan Kahn and the participants in The Politics of IP Symposium, The University of Texas School of Law, January 2025, especially Melissa Wasserman. For time and resources to research the first draft, many thanks to the Institute for Advance Study, Princeton, NJ.

<sup>1.</sup> See 35 U.S.C. § 101 ("Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, [subject to conditions]."). This Essay concentrates on utility patents. Patent Essentials, U.S. PATENT & TRADEMARK OFFICE, https://www.uspto.gov/patents/basics/essentials #questions [https://perma.cc/L97N-8Q3X] (describing the three types of patents and what each type covers).

<sup>2.</sup> See, e.g., Sapna Kumar, Innovation Nationalism, 51 CONN. L. REV. 205, 232–33 (2019) (comparing strong patent laws to protectionist tariffs); Cynthia M. Ho, Confronting Intellectual Property Nationalism, 100 DENV. L. REV. 109, 127–28 (2022) (explaining how countries use IP rights to influence the export of IP-protected goods and prevent domestic IP from being stolen).

<sup>3.</sup> Ayelet Shachar, *The Race for Talent: Highly Skilled Migrants and Competitive Immigration Regimes*, 81 N.Y.U. L. REV. 148, 149–50, 149 n.2 (2006) (asserting that "highly skilled immigrants," including Nobel laureates and patent holders, have traditionally helped the U.S. maintain an advantage in the "global race for talent"); see also William P. Kerr, *The Gift of Global Talent: Innovation Policy and the Economy*, 20 INNOVATION POL'Y & ECON. 1, 3 (2020) (using patent data as one indicator of "high-skilled individuals" in the U.S. and internationally).

<sup>4.</sup> I use "American" in this Essay to describe a person who lives in the U.S., recognizing that in other contexts, the word is used to refer to those who live in all parts of the Americas.

This Essay focuses on the third form of the border politics of patents, in which the "immigrant inventor" is a key category. U.S. patents are used to identify immigrants who belong to this category and to define a subset of inventors: the foreign-born. This border politics of patents arises out of the belief that Americans are particularly inventive, and that inventiveness is a proxy for the capacity to perform the duties of U.S. citizenship, another way of dividing those "suited for citizenship" from those "unfit for naturalization."<sup>5</sup> In previous work, I have traced the origins of such beliefs to the nineteenth century.<sup>6</sup> These beliefs made patents into political tools used in the late nineteenth and early twentieth century by white U.S. women and Black U.S. women and men advocating for full citizenship rights, including the right to vote.<sup>7</sup> Immigrants, as groups seeking full legal personhood as well as inclusion within the identification "American," have also used patents as political tools.<sup>8</sup> They and their allies found that the "immigrant inventor" can be mobilized to inform debates about who is eligible for immigration and naturalization.

Twenty-first-century Americans identify inventors as one of the occupational categories considered most representative of the U.S. national identity, that is, "quintessentially American."<sup>9</sup> U.S. citizens consider inventiveness to be a quality that demonstrates readiness to join the U.S. body politic in ways that, for example, the ability to practice medicine or work on a farm do not, even though immigrants make critical contributions to the U.S. economy in healthcare and agriculture.<sup>10</sup> The most direct way of claiming the

<sup>5.</sup> IAN HANEY LÓPEZ, WHITE BY LAW: THE LEGAL CONSTRUCTION OF RACE 11–12 (rev. and updated ed., 2006) (explaining how naturalization laws historically reflected a stark distinction in eligibility between "being non-White" and "being White").

<sup>6.</sup> Kara W. Swanson, *Beyond the Progress of the Useful Arts: The Inventor as Useful Citizen*, 60 HOUS. L. REV. 363, 394–98 (2022); Kara W. Swanson, *They Knew It All Along: Patents, Social Justice, and Fights for Civil Rights, in* THE CAMBRIDGE HANDBOOK OF INTELLECTUAL PROPERTY AND SOCIAL JUSTICE 208, 213 (Steven D. Jamar & Lateef Mtima, eds., 2024).

<sup>7.</sup> Swanson, *They Knew It All Along, supra* note 6, at 215–18; Kara W. Swanson, *Inventing the Woman Voter: Suffrage, Ability, and Patents*, 19 J. GILDED AGE & PROGRESSIVE ERA 559, 560–63 (2020); Kara W. Swanson, *Race and Selective Legal Memory: Reflections on Invention of a Slave*, 120 COLUM. L. REV. 1077, 1081–82 (2020).

<sup>8.</sup> BARBARA YOUNG WELKE, LAW AND THE BORDERS OF BELONGING IN THE LONG NINETEENTH CENTURY UNITED STATES 3 (2010) (defining "legal personhood" as the rights stemming from "a right to one's person, one's body, and one's labor").

<sup>9.</sup> Rahsaan Maxwell, Occupations, National Identity, and Immigrant Integration, 50 COMPAR. POL. STUD. 232, 239–40 (2017).

<sup>10.</sup> See Alejandro Gutiérrez-Li, Feeding America: How Immigrants Sustain US Agriculture, BAKER INST. FOR PUB. POL'Y (July 19, 2024), https://www.bakerinstitute.org/research/feedingamerica-how-immigrants-sustain-us-agriculture [https://perma.cc/6SRR-UDMW] (describing the

identity of "inventor" is to become a patentee, certified as the inventor of something new, useful, and non-obvious.<sup>11</sup> With heightened public interest in U.S. immigration law and policy in the first decades of the twenty-first century, researchers have turned to patent records to identify and count immigrant inventors.<sup>12</sup> Patents as markers of the most "American" immigrants are part of the current politics of the U.S. border. This Essay argues that the origins of this aspect of the border politics of patents are linked to discredited racial science, an association that should lead us to scrutinize how and when patents are mobilized in support of the suitability of groups for citizenship.

In Part I, this Essay uses historical research to uncover the emergence of the "immigrant inventor" as a politically salient category during the immigration debates of the early twentieth century, when the U.S. was switching from borders loosely controlled by the states to restrictive federal immigration laws.<sup>13</sup> This transition culminated in the Immigration Act of 1924, which established national origin quotas that remained in place until 1965. In Part II, this Essay argues that the salience of the immigrant inventor was founded on a combination of new racial science and preexisting beliefs about the linkages among patents, inventiveness, and U.S. citizenship. It highlights how turn-of-the-twentieth-century ethnologists and eugenicists

<sup>&</sup>quot;critical role of immigrant farmworkers in U.S. agriculture"); Jeanne Batalova, *Immigrant Health-Care Workers in the United States*, MIGRATION POL'Y INST. (April 7, 2023), https://www.migrationpolicy.org/article/immigrant-health-care-workers-united-states [https:// perma.cc/NM3N-4LWX] (noting that immigrants play "a vital role at all levels of health care," with foreign-born workers making up 26.5% of U.S. physicians and surgeons, and nearly 40% of home health aides).

<sup>11.</sup> Jason Rantanen & Sarah E. Jack, *Patents as Credentials*, 76 WASH. & LEE L. REV. 311, 339–40, 353–54, 356 (2019).

<sup>12.</sup> See, e.g., Robert Krol, Effects of Immigration on Entrepreneurship and Innovation, 41 CATO J. 551, 552, 560–62 (2021) (noting public attention to immigration and reviewing recent research on the number of patents that belong to immigrants); see also Lydia DePillis & Jeanna Smialek, Tech Makes an Economic Case for Skilled Immigrants. Will Trump Bite?, N.Y. TIMES (Dec. 23, 2024), https://www.nytimes.com/2024/12/17/business/economy/trump-tech-h1b-visa.html [https://perma.cc/WD3D-3SQT] (linking debate about skill-based immigration to research using U.S. patent counts).

<sup>13.</sup> Gerald L. Neuman, *The Lost Century of American Immigration Law*, 93 COLUM. L. REV. 1833, 1834 (1993) (reviewing state laws from 1776 to 1875 that relegated transborder movement); *see also* HIDETAKA HIROTA, EXPELLING THE POOR: ATLANTIC SEABOARD STATES & THE 19TH-CENTURY ORIGINS OF AMERICAN IMMIGRATION POLICY 1–5 (2017) (exploring state immigration laws from 1830s to 1880s focused on expelling foreign paupers and those "likely to become a public charge" and state influence on an emerging national immigration policy, including the Federal Immigration Act of 1882); KEVIN KENNY, THE PROBLEM OF IMMIGRATION IN A SLAVEHOLDING REPUBLIC: POLICING MOBILITY IN THE 19TH-CENTURY UNITED STATES 1–15 (2023) (explaining "how the existence, abolition, and legacies of slavery shaped immigration policy as it moved from the local to the federal level over the course of the nineteenth century").

used inventiveness to distinguish among what they called human "races" and develop a hierarchy of peoples from most "savage" to most "civilized."<sup>14</sup> As U.S. native-born elites used racial science to advocate for racialized immigration restrictions, immigrant inventors became part of public discussions. In Part III, this Essay connects these early-twentieth-century arguments to twenty-first-century border politics by demonstrating the persistence of the "immigrant inventor" as a politically relevant category. It argues that this persistence reflects the troubling recurrence of claims that national origin and/or ethnicity differentiates human groups based on mental ability.

# I. The Emergence of the "Immigrant Inventor"

#### A. Immigration before Federal Immigration Restrictions

In 1870, a twenty-three-year-old Scotsman emigrated from London, England to Ontario, Canada with his parents.<sup>15</sup> There he set up a workshop to continue research into devices to transmit sound.<sup>16</sup> In April 1871, he accepted an employment opportunity in Boston, Massachusetts and entered the U.S. for the first time.<sup>17</sup> For the next several years, he alternated between the Boston area and his family's home in Ontario where he worked in the summers.<sup>18</sup> Alexander Graham Bell made U.S. inventive history in March 1876 when he transmitted his voice by wire across his Massachusetts laboratory, urgently telling his assistant: "Mr. Watson—Come here—I want to see you."<sup>19</sup> After demonstrating several prototypes of his telephone at the Centennial Exposition in Philadelphia that summer,<sup>20</sup> Bell received international attention as an inventor and has remained famous ever since.

<sup>14.</sup> See LEWIS HENRY MORGAN, ANCIENT SOCIETY: OR RESEARCHES IN THE LINES OF HUMAN PROGRESS FROM SAVAGERY THROUGH BARBARISM TO CIVILIZATION 3–8 (1877) (using inventions as evidence of human progress and claiming that "certain portions of the human family" remain "savage" and "barbarous" while others have become "civilized"). Note that "ethnology" preceded the professionalization of the discipline of "anthropology." ROBERT LAWRENCE GUNN, ETHNOLOGY AND EMPIRE: LANGUAGES, LITERATURE, AND THE MAKING OF THE NORTH AMERICAN BORDERLANDS 4 (2015). Lewis Henry Morgan, a lawyer turned student of human culture, is also often referred to as an anthropologist. THOMAS C. PATTERSON, A SOCIAL HISTORY OF ANTHROPOLOGY IN THE UNITED STATES 32 (2d ed. 2021).

<sup>15.</sup> Charlotte Gray, Reluctant Genius: Alexander Graham Bell and the Passion for Invention 3, 17–19 (2006).

<sup>16.</sup> Id. at 28.

<sup>17.</sup> Id. at 33.

<sup>18.</sup> Id. at 36, 43, 71.

<sup>19.</sup> SETH SHULMAN, THE TELEPHONE GAMBIT: CHASING ALEXANDER GRAHAM BELL'S SECRET 11–14 (2008).

<sup>20.</sup> GRAY, supra note 15, at 136–38.

When Bell repeatedly crossed the U.S. border as a non-citizen and successfully petitioned for naturalization in 1882, there was no legal impediment to his entry or path to citizenship.<sup>21</sup> At its founding, the U.S. had no federal restrictions on immigration, although there were racialized restrictions on naturalization.<sup>22</sup> Since 1790, the U.S. had restricted naturalization to "free white person[s]."<sup>23</sup> After the Civil War, in 1870, Congress expanded the right to naturalize to include "aliens of African nativity and . . . persons of African descent" but otherwise retained the "free white" restriction.<sup>24</sup> Bell, as a Scotsman readily racialized as white, had no difficulty getting his naturalization petition approved. It is therefore not surprising that even when Bell gave interviews in the crisp British English he had learned from his father, an elocution teacher,<sup>25</sup> reporters seldom mentioned Bell's national origins. They simply were not newsworthy. Bell gained—and has retained—fame as an "American inventor."<sup>26</sup> Rather than call him an "immigrant inventor," news reports referred to Bell as "professor," "inventor," and, by the time of his death, a "great inventor."<sup>27</sup>

This inattention to birthplace when telling the story of someone who had invented while living in the U.S. was not unusual in the nineteenth century. John Ericsson (1803–1889), a Swedish native who achieved national fame for his military inventions during the Civil War, was also never called an "immigrant inventor" in the 1860s.<sup>28</sup> He was "generally claimed as an

27. See, e.g., Lecture by Prof. Alexander Graham Bell—An Exhibition of the Speaking Telephone, N.Y. TIMES, May 18, 1877, at 2; Another Great Invention, WASH. POST, Sept. 26, 1880, at 3; Telephone Triumph, N. PLATTE SEMI-WKLY. TRIB. (Neb.), Jan. 29, 1915; Great Inventor Claimed by Death, ABBEVILLE PRESS & BANNER (S.C.), Aug. 4, 1922; A.G. Bell, 75, Inventor of Phone, Dead, RICHMOND PALLADIUM (Ind.), Aug. 2, 1922.

<sup>21.</sup> See id. at 227 (recounting how easy it was for Bell to become a U.S. citizen).

<sup>22.</sup> See CARL J. BON TEMPO & HASIA R. DINER, IMMIGRATION: AN AMERICAN HISTORY 88– 89 (2022) (explaining that there were "few legal barriers to migration" and free opportunity for naturalization for "a white male of European background"); *cf. supra* note 14 and accompanying text (describing early state immigration restrictions).

<sup>23.</sup> Naturalization Act of 1790, ch. 3, 1 Stat. 103.

<sup>24.</sup> Naturalization Act of 1870, ch. 254, 16 Stat. 254. This law was interpreted to prevent naturalization by Asians. LÓPEZ, *supra* note 5, at 31–32.

<sup>25.</sup> GRAY, supra note 15, at 3-4.

<sup>26.</sup> See CHRISTOPHER BEAUCHAMP, INVENTED BY LAW: ALEXANDER GRAHAM BELL AND THE PATENT THAT CHANGED AMERICA 3 (2015) (noting Bell's twenty-first century fame as an influential American).

<sup>28.</sup> See, e.g., Revolution in Naval Artillery—Arrival of the Great Ericsson Gun, N.Y. TIMES, Nov. 17, 1863, at 2 (describing Ericsson's invention of the "most formidable gun yet constructed" without any mention of his national origin); see also Thomas J. Brown & Svea Larson, Swedish Migration, Naval Militarism, and Industrial Modernity: The John Ericsson Memorial in Washington, DC, 54 WINTERTHUR PORTFOLIO 117, 119 (2020) (describing Ericsson's Swedish birth and rise to fame in the U.S.).

American," even when described as "a Swede."<sup>29</sup> In a nation in which all, other than Native Americans, traced their ancestry to those born elsewhere, the fact that Bell and Ericsson had immigrated was sometimes mentioned, but not made central to their public identities.<sup>30</sup> At the time each rose to fame, there were no border politics of patents that made counting inventive immigrants and their patents politically relevant.

Federal immigration law was also virtually non-existent when Michael Pupin came to the U.S. by boat in 1874, arriving just three years after Bell.<sup>31</sup> Born in a rural village in what is now the Republic of Serbia, Pupin was sixteen years old, spoke no English, had no trade, and had only five cents in his pocket.<sup>32</sup> When Pupin arrived at Castle Garden Immigration Station in New York harbor, he was nervous about passing the screening by New York state officials.<sup>33</sup> The officials had the authority to exclude paupers.<sup>34</sup> U.S. residents were increasingly wary of unfettered immigration and the ability of people like Pupin, impoverished non-Protestants, to assimilate and become Americans.<sup>35</sup> Pupin, however, passed his screening—as did the vast majority

<sup>29.</sup> The Navy of Sweden-An Ericsson Iron-Clad for the King, CHI. TRIB., Nov. 11, 1864.

<sup>30.</sup> The U.S. population includes both voluntary immigrants and their descendants, and involuntary migrants—most notably the survivors of the Middle Passage—and their descendants. In other work, I have explored how the descendants of those survivors also have been involved in a politics of patents and inventiveness focused on access to civil rights. *See, e.g.*, Swanson, *Race and Selective Legal Memory, supra* note 7, at 1082 (exploring how African American advocates "mobilized patents" as political tools to "oppose anti-black racism and racist laws"). *See generally* Kara W. Swanson, *Centering Black Women Inventors: Passing and the Patent Archive*, 25 STAN. TECH. L. REV. 305 (2022) (exposing the practice and consequences of situational passing in the patent system as a response to constraints on marginalized inventors, including the legacy of slavery).

<sup>31.</sup> Pupin, Michael Idvorsky, in 11 COMPLETE DICTIONARY OF SCIENTIFIC BIOGRAPHY 213 (2008).

<sup>32.</sup> For the details of Pupin's life, see generally MICHAEL PUPIN, FROM IMMIGRANT TO INVENTOR (1923); *Pupin, Michael Idvorsky, supra* note 31, at 213; A.P. Wills, *Obituary: Michael Idvorsky Pupin*, 81 SCI. 475 (1935).

<sup>33.</sup> *See* PUPIN, *supra* note 31, at 39–41 (describing how Pupin felt discouraged because he "had nothing of any immediate value to offer to the land [he] was about to enter" and how the officials made an exception by allowing him to enter without any money).

<sup>34.</sup> Neuman, *supra* note 13, at 1852–57 (explaining New York laws to exclude immigrant paupers); HIROTA, *supra* note 13, at 140–42 (describing a New York law enacted in 1873 to address fear of impoverished immigrants); BON TEMPO & DINER, *supra* note 22, at 93–94 (noting New York laws that required shipmasters to pay bond on immigrants whom state officials thought might become paupers and gave state officials power to return would-be immigrants).

<sup>35.</sup> BON TEMPO & DINER, *supra* note 22, at 93–95 (noting the concern of middle-class Protestant native-born Americans about increasing non-Protestant and poor immigrants, particularly from Ireland); HIROTA, *supra* note 13, at 135–39 (explaining the rising concern about foreign-born paupers as "undeserving poor").

of arrivals—and in 1883, Pupin both became a U.S. citizen and graduated from Columbia University in New York City.<sup>36</sup>

Pupin had transformed himself from a penniless immigrant into a welleducated U.S. citizen, but he was not yet famous. Significant media attention came in 1901. Now a Columbia professor, Pupin invented a coil used to improve the transmission of electric power, a means of doubling the practical distance of telephone calls.<sup>37</sup> He sold the rights to his patented invention to the American Telephone and Telegraph Company (part of Bell's network of companies) for \$455,000, a prodigious sum at the time.<sup>38</sup> In contrast to Bell, as Pupin became newsworthy, he was never described as simply an inventor, but rather as an "immigrant inventor."<sup>39</sup> A key distinction in the public perception of these two immigrants who each contributed significantly to telephony was the timing of their rise to fame. In the twenty-five years between Bell's demonstration of his telephone and Pupin's introduction of his coil, U.S. patent law, by which each man certified his inventiveness and succeeded in commercializing it, remained largely the same. But in that quarter century, a new border politics of patents developed as the U.S. began to debate and enact immigration restrictions based on racialized beliefs about differential ability.40

<sup>36.</sup> See PUPIN, supra note 31, at 135, 137 (describing Pupin obtaining American citizenship the day before he graduated college); BON TEMPO & DINER, supra note 22, at 94–95 (explaining that state laws did little to "stem immigration or regulate it in any meaningful way").

<sup>37.</sup> Cf. James E. Brittain, The Introduction of the Loading Coil: George A. Campbell and Michael I. Pupin, 11 TECH. & CULTURE 36, 36–38 (1970) (explaining that Pupin received both fame and fortune for his role in introducing the loading coil, but also arguing that Pupin's contribution has been overstated and another engineer was first to theorize the solution).

<sup>38.</sup> See PUPIN, supra note 31, at 337–38 (stating that he was treated "most generously" for his patent rights); see also Brittain, supra note 37, at 54–55, 54 n.59 (explaining that the sale occurred in a series of installments as American Telephone & Telegraph awaited the outcome of an interference, which Pupin won); BEAUCHAMP, supra note 26, at 180 (explaining that American Telephone and Telegraph Company had been formed in 1885 as part of the network of companies controlled by American Bell Company).

<sup>39.</sup> For examples of how the press consistently highlighted Pupin's immigrant status in conjunction with his accomplishments, see *Prof. Pupin's Odd Career: From a Turkish Bath Attendant to a Columbia Professorship. Was a Servian [sic] Immigrant: Discoverer of Ocean Telephony Landed in this Country Almost Penniless—Now a Millionaire, N.Y. TIMES, Jan. 27, 1901; Untitled, PHILIPSBURG MAIL (Mont.), March 1, 1901; Pioneer Press, LITTLE FALLS HERALD (Minn.), Mar. 1, 1901; Pupin Heads Scientists: American Association Names Immigrant Inventor, CINCINNATI POST (Ohio), Feb. 3, 1925, at 15; David Dietz, Highest American Engineering Honor Is Bestowed on Scientist Who Rose from Immigrant to Inventor, INDIANAPOLIS TIMES, Oct. 24, 1931, at 4; Pupin Is Dead; His Inventions Won Him Fame, WORLD TELEGRAM, Mar. 12, 1935, at 29.* 

<sup>40.</sup> See E.P. HUTCHINSON, LEGISLATIVE HISTORY OF AMERICAN IMMIGRATION POLICY 1798– 1965, at 66–127 (1981) (tracing legislative history of immigration bills from 1876 to 1901). For the

#### B. The "Immigrant Inventor" and Immigration Restriction

In 1875, the U.S. passed the Page Act, prohibiting the entry of unfree laborers from China, Japan, and "any Oriental country"; "women for the purposes of prostitution"; and felons.<sup>41</sup> The Page Act marked the beginning of increasingly restrictive federal immigration laws that targeted would-be immigrants both by country of origin and by excluded category.<sup>42</sup> In 1882, Congress passed the Chinese Exclusion Act, the first law to prohibit the naturalization of immigrants from a specific country (China).<sup>43</sup> Just a few months later, Congress added two excludable classes: those considered "lunatics" and "idiots," and those deemed likely to become a public charge.<sup>44</sup> Over time, the U.S. expanded both the number of excludable categories and the scope of national origin restrictions.<sup>45</sup>

Immigration from Europe, however, continued virtually unimpeded, with only about one percent of would-be European immigrants refused entry.<sup>46</sup> Many U.S. residents pushed for more restrictions on European immigration, seeking to reduce or eliminate immigrants that they considered undesirable. In Boston, some of the city's most elite men formed the Immigration Restriction League in 1894 to preserve their "thrifty, capable Yankee blood" from "inferior races."<sup>47</sup> The Boston Yankees, like native-born U.S. residents elsewhere descended from English immigrants, drew upon new ideas that there were different types of whiteness, separated into so-

broader public debates, legal changes, and effects, see generally BON TEMPO & DINER, *supra* note 22, at 95–160; ARISTIDE R. ZOLBERG, A NATION BY DESIGN: IMMIGRATION POLICY IN THE FASHIONING OF AMERICA 185–216 (2006); ERIKA LEE, AMERICA FOR AMERICANS: A HISTORY OF XENOPHOBIA IN THE UNITED STATES 75–128 (2019); REECE JONES, WHITE BORDERS: THE HISTORY OF RACE AND IMMIGRATION IN THE UNITED STATES FROM CHINESE EXCLUSION TO THE BORDER WALL 40–48 (2021).

<sup>41.</sup> Page Act of 1875, ch. 141, 18 Stat. 477 (repealed 1974).

<sup>42.</sup> HUTCHINSON, *supra* note 40, at 66 (noting that the Page Act of 1875 "marks the beginning of direct federal regulation of immigration" and is the first designation of "certain classes of aliens as excludable").

<sup>43.</sup> Chinese Exclusion Act of 1882, ch. 126, 22 Stat. 58 (repealed 1943); *see also* LEE, *supra* note 40, at 96–99 (detailing American enforcement measures to prohibit Chinese immigration and criminalize illegal immigration). For the historical context of the statute, see generally ANDREW GYORY, CLOSING THE GATE: RACE, POLITICS, AND THE CHINESE EXCLUSION ACT (1998).

<sup>44.</sup> Immigration Act of 1882, ch. 376, 22 Stat. 214.

<sup>45.</sup> See BON TEMPO & DINER, supra note 22, at 118.

<sup>46.</sup> MAE M. NGAI, IMPOSSIBLE SUBJECTS: ILLEGAL ALIENS AND THE MAKING OF MODERN AMERICA 18 (2004).

<sup>47.</sup> DANIEL OKRENT, THE GUARDED GATE: BIGOTRY, EUGENICS, AND THE LAW THAT KEPT TWO GENERATIONS OF JEWS, ITALIANS, AND OTHER EUROPEAN IMMIGRANTS OUT OF AMERICA 58 (2019) (quoting a letter published in the *Boston Herald* in June 1894 from one of the Immigration Restriction League founders).

called human races.<sup>48</sup> In 1901, when Pupin received press attention for his invention, his status as an immigrant was noteworthy because Immigration Restriction League members and others were arguing that the immigration and naturalization of "free white" people like Pupin was a threat to the U.S. body politic. Here was a non-Yankee, non-Protestant, eastern European immigrant who had achieved the most American of occupations— inventor—and had successfully defended his patent in an interference action, legally proving him to be the first originator of a valuable and useful device.<sup>49</sup> The consistent reference to Pupin's national origins heralded the emergence of a new border politics of patents. Pupin became the best-known example of the "immigrant inventor" as this newly defined category became part of the debates over racialized immigration restrictions.

In 1917, Congress created an expanded "barred Asiatic zone" and new restrictions intended to reduce European immigration.<sup>50</sup> Would-be immigrants needed to pass a literacy test in their native language, a hurdle intended to exclude poor immigrants from southern and eastern European countries where literacy rates were low.<sup>51</sup> The Act also expanded the list of excluded categories to include "feeble-minded persons," the sick, the disabled, anarchists, and alcoholics, as well as criminals, vagrants, and polygamists.<sup>52</sup> Within months, there was a new spate of newspaper reports about Pupin, reminding readers that someone who had arrived a "penniless Serbian immigrant" was now a "valuable" inventor and "one of [the] world's greatest scientists."<sup>53</sup> Despite Pupin's example, many in the U.S. worried that literacy tests and excluded categories were not sufficient to keep out

<sup>48.</sup> LEE, *supra* note 40, at 113–14.

<sup>49.</sup> See Brittain, supra note 37, at 54–55 (describing the interference action and the decision in Pupin's favor).

<sup>50.</sup> Immigration Act of 1917, ch. 29, § 3, 39 Stat. 874, 875–77 (amended 1924); see NGAI, supra note 46, at 18 ("[T]he Immigration Act of 1917 excluded Asian Indians and all other native inhabitants of a 'barred Asiatic zone' that ran from Afghanistan to the Pacific."). While the Act did not use the term "barred Asiatic zone," its geographic restrictions became known as the "barred zone." Seema Sohi, Barred Zones, Rising Rides, and Radical Struggles: The Antiradical and Anti-Asian Dimensions of the 1917 Immigration Act, 109 J. AM. HIST. 298, 299 (2022).

<sup>51.</sup> Immigration Act of 1917 § 3; *see also* OKRENT, *supra* note 47, at 53 (explaining that proponents of literacy tests knew that literacy rates in southern and eastern Europe were low and used them for that reason).

<sup>52.</sup> Immigration Act of 1917 § 3.

<sup>53.</sup> E.g., Gains Fame Here: Serbian Immigrant Now One of World's Greatest Scientists, CARLISLE INDEP. (Ark.), July 26, 1917; New Discovery to Add to Wealth of Man Who Came to United States Penniless in 1874, PERTH AMBOY EVENING NEWS (N.J.), July 28, 1917; Gains Fame Here, FULTON CNTY. TRIB. (Ohio), Aug. 3, 1917; Gains Fame Here, MORGAN CITY DAILY REV. (La.), Sept. 22, 1917; Gains Fame Here, TENSAS GAZETTE (La.), Nov. 2, 1917.

undesirables.<sup>54</sup> As an "emergency measure," Congress, in 1921, limited immigrants of each national origin annually to three percent of the number of foreign-born individuals from that country as counted in the U.S. census of 1910, capping annual migration from Europe at about 350,000.<sup>55</sup> The legislation provided that within fourteen months, Congress should enact a permanent quota policy.<sup>56</sup>

Already active in the Serbian immigrant community, Pupin now used his fame as an "immigrant inventor" to intervene in U.S. immigration debates.<sup>57</sup> He addressed a national assembly of businessmen meeting to discuss what they termed "the immigration problem."<sup>58</sup> Pupin offered himself as a "noted inventor" to shift their perception of immigrants as inferior and oppose what he called the "law of restriction."<sup>59</sup> But his autobiography, *From Immigrant to Inventor*, succeeded in bringing his proimmigrant message to a much bigger audience. For eleven months, beginning in September 1922, the publisher kept the phrase "From Immigrant to Inventor" on the front cover of the monthly popular magazine *Scribner's*, publishing one chapter a month.<sup>60</sup> These chapters were summarized or reprinted by numerous newspapers that shared with their readers the story of a penniless cowherd who became an inventor.<sup>61</sup> When the book was released in 1923, it was a great success, rapidly going through numerous editions and

55. Emergency Quota Act of 1921, ch. 8, 42 Stat. 5 (repealed 1965); BON TEMPO & DINER, *supra* note 22, at 169–70.

56. Emergency Quota Act of 1921, ch. 8, 42 Stat. 5.

57. See MICHAEL F. PUPIN, THE IMMIGRANT'S POINT OF VIEW 4 (1922) (describing Pupin's sixteen years as president of the Slavonic Immigrant Society and many visits to Ellis Island); Wills, *supra* note 32, at 478 (recounting Pupin's various contributions to the Serbian immigrant community).

58. PUPIN, *supra* note 57, at 4 (republishing address to Pittsburgh Convention of the National Personnel Association, which considered the "immigration problem" "one of the greatest problems in this country").

59. Id. at 2, 4.

60. E.g., Michael Pupin, From Immigrant to Inventor—I—What I Brought to America, 72 SCRIBNER'S MAG. 259 (Sept. 1922); Michael Pupin, From Immigrant to Inventor—II—The Hardships of a Greenhorn, 72 SCRIBNER'S MAG. 409 (Oct. 1922); Michael Pupin, From Immigrant to Inventor—XI—The Rise of Idealism in American Science, 74 SCRIBNER'S MAG. 84 (July 1923).

61. For examples of these summaries and reprints, see *From Immigrant to Inventor*, BEMIDJI DAILY PIONEER (Minn.), Aug. 28, 1922, at 4; *Canaan*, CONN. W. NEWS, Aug. 31, 1922, at 5; *Bogus Prune Pie*, GRAND FORKS HERALD (N.D.), Sept. 6, 1922, at 4; *A Great Inventor's Boyhood*, BIRMINGHAM AGE-HERALD (Ala.), Sept. 17, 1922, at 5; *Scribner's for June*, WALLACE MINER (Idaho), May 3, 1923, at 2; *Light and Sound Alike*, PHILLIPS CNTY. HERALD (Colo.), July 26, 1923, at 7.

<sup>54.</sup> See NGAI, supra note 46, at 19–20 (explaining how even after literacy tests and other restrictions were enacted, many sought to restrict immigration further); BON TEMPO & DINER, supra note 22, at 142–43 (describing those who argued that "the mere presence of immigrants had a negative effect on the native-born").

reprintings, and it remained in print for decades.<sup>62</sup> It won a Pulitzer Prize in 1924.<sup>63</sup> Public libraries from Maine to California acquired the book.<sup>64</sup> Well-to-do white women gave book reports to their clubs.<sup>65</sup> The "immigrant inventor" was now part of public discussion, with the Serbian Pupin as the chief example.

Although the Emergency Act of 1921 cut immigration from Poland by seventy percent, from Yugoslavia by nearly seventy-five percent, and from Italy by over eighty percent,<sup>66</sup> members of the Immigration Restriction League and their allies were unhappy about the allocation of forty-five percent of the immigrant slots to those from southern and eastern European countries.<sup>67</sup> They successfully pushed Congress both to reduce the annual cap to 155,000 and to base quotas on two percent of the immigrant population as recorded in the census of 1890, a change that shifted the allocation of slots to those from northern and western Europe, particularly Great Britain.<sup>68</sup> When the national origin quotas of the Immigration Act of 1924 were implemented, Pupin's homeland (now part of Yugoslavia) had a quota of 895, compared to 65,721 allotted to Bell's homeland, Great Britain.<sup>69</sup>

<sup>62.</sup> See From Immigrant to Inventor, 100 J. EDUC. 257, 257 (1924) ("A second edition was required in two months, a third in four months, and a fourth in March last. We think this is unprecedented in biographical literature."); see also MICHAEL PUPIN, FROM IMMIGRANT TO INVENTOR, at i, iv (popular ed. 1925) (listing reprintings in November 1923, January 1924, March 1924, and so on, and describing the wide audience the book had reached). For additional later editions, see, for example, MICHAEL PUPIN, FROM IMMIGRANT TO INVENTOR: AN EXAMPLE FOR YOUNG AMERICANS (1934); MICHAEL PUPIN, FROM IMMIGRANT TO INVENTOR (1960); MICHAEL PUPIN, FROM IMMIGRANT TO INVENTOR (1960); MICHAEL PUPIN, FROM IMMIGRANT TO INVENTOR (1963); MICHAEL PUPIN, FROM IMMIGRA

<sup>63.</sup> Announces Winners of Pulitzer Prizes, EVENING STAR (D.C.), May 12, 1924, at 17.

<sup>64.</sup> For examples of reports that Pupin's book was now available at the local library, see *Many New Books Now at Library*, WINDHAM CNTY. OBSERVER (Putnam, Conn.), Nov. 28, 1923, at 2; *New Books at the Public Library*, INDEP.-REP. (Skowhegan, Me.), Feb. 7, 1924, at 11; *New Books Added at Public Library*, DAILY KENNEBEC J. (Augusta, Me.), Oct. 2, 1924, at 5; *New Library Books*, GRANT CNTY. HERALD (Lancaster, Wis.), April 1, 1925, at 1; *New Books at Local Library*, IMPERIAL VALLEY PRESS (El Centro, Cal.), April 17, 1925, at 6.

<sup>65.</sup> See, e.g., Notes of Chevy Chase Clubs and Societies for Week Just Closed, SUNDAY STAR (D.C.), Dec. 14, 1924, at 6 (Reading Class of Chevy Chase); *Meetings of Indianapolis Clubs to Be Held Next Week*, INDIANAPOLIS TIMES, Jan. 14, 1928, at 9 (Minerva Club); Nannie Lancaster, *News of the Clubs*, SUNDAY STAR (D.C.), April 28, 1929, at 21 (International Federation of Catholic Alumnae, District of Columbia Chapter).

<sup>66.</sup> OKRENT, supra note 47, at 258.

<sup>67.</sup> NGAI, supra note 46, at 21.

<sup>68.</sup> Immigration Act of 1924, ch. 190, § 11, 43 Stat. 153, 159; *id.* at 22–23; *see also* OKRENT, *supra* note 47, at 306–08 (describing the transformative effect of basing quotas on the 1890 census, which "had preceded most of the 'unwanted' immigration").

<sup>69.</sup> NGAI, supra note 46, at 28-29.

Although allocated by country, the national origin quotas mingled notions of "race" and nation."70 The law created a "quota board" to determine "national origins" of all U.S. residents in 1890, and then to create quotas that would replicate the national origins distribution as of that date.<sup>71</sup> When the board defined "national origins," it did not mean country of birth. The law excluded those in the census categories of "black," "mulatto," "Chinese," "Japanese" and "Hindu," even if U.S.-born, from the U.S. population counts used to create quotas, thus drastically increasing the percentage of those racialized as "white."72 Without census data about nation of origin, those racialized "white" were categorized into national origin groups based on surnames and a hodgepodge of "theoretically suspect" and methodologically dubious means that slanted the quotas toward the assumed origins of "Yankee blood," that is, Great Britain.73 This mingling of nationality and race continued as the quotas were applied. For example, although the board allocated a quota to China, the quota was only for those considered "non-Chinese," as Chinese were excluded as ineligible for citizenship.<sup>74</sup> The West Indies, as a British colony, was included within the generous quota granted to Great Britain, but in practice, Black West Indians were not granted visas.<sup>75</sup> In the 1930s, as German Jews sought to flee from Hitler's anti-Semitic laws and policies, the quota for Germany remained unfilled while U.S. officials denied them visas.<sup>76</sup> What counted was an immigrant's ethnic identity, which the legislators in 1924 believed marked a set of racialized characteristics. The Immigration Act of 1924 sharply changed immigration to the U.S.<sup>77</sup>

# II. The Immigrant Inventor and the Politics of Restriction

#### A. Inventiveness and Race

Pupin's fame as an "immigrant inventor" was far from sufficient to combat the tide of xenophobia that drove U.S. immigration policy in the

<sup>70.</sup> See id. at 23 (explaining the changing meanings of "race" and "nation" over time and their overlaps).

<sup>71.</sup> Id. at 25.

<sup>72.</sup> See id. at 26 (describing the legal requirements and Quota Board processes).

<sup>73.</sup> *See id.* at 25, 32–35 (describing the arbitrary and imprecise methodology used to determine the national origins of the "white, native-stock population" and the surrounding controversies).

<sup>74.</sup> Id. at 26–27.

<sup>75.</sup> BON TEMPO & DINER, supra note 22, at 174.

<sup>76.</sup> Id. at 195-97 (discussing how the German quota remained unfilled from 1934-1938).

<sup>77.</sup> See OKRENT, supra note 47, at 348–49 (recounting the dramatic shift in immigration to the U.S. after the 1924 Act).

1920s.<sup>78</sup> When he offered himself as one example of an inventive immigrant, Pupin was entering an ongoing public discussion in which inventiveness was considered to be an innate characteristic that differed among what were increasingly called human races. These groupings divided humans not only into the five races identified by a federal court ruling on a naturalization petition in 1878 (that is, Caucasian, Mongolian, Ethiopian, American, and Malay),<sup>79</sup> but also subdivided white Europeans into biologically distinct groups, each with different abilities.

In 1891, the U.S. celebrated the centennial of its patent system with a three-day gathering in Washington, D.C.<sup>80</sup> Bell was given a "place of honor" as a celebrity American inventor.<sup>81</sup> Amidst the inventors and politicians on the program was Otis T. Mason, curator of ethnology at the Smithsonian Institution.<sup>82</sup> Mason provided a scientific explanation for a putative truth that the white male audience largely assumed: white Americans were a uniquely inventive people, and their inventiveness distinguished them from other races.<sup>83</sup> Ethnology, Mason told them, "informs us that in describing this arc of civilization some races have only marked time . . ."<sup>84</sup> The "most primitive races" simply replicate the inventions of early humans, such as baskets, fishhooks, spears, and weavings.<sup>85</sup> Mason differentiated among so-called races such as the "Mediterranean," the "Semite," the "Mongolian," and "Africans" based on their inventiveness, finding the "Mediterranean" the

<sup>78.</sup> See LEE, supra note 40, at 113–46 (detailing how xenophobic ideas were reflected in American culture and government).

<sup>79.</sup> In re Ah Yup, 1 F. Cas. 223, 223–24 (1878); see also LÓPEZ, supra note 5, at 4 (discussing racial categories in Ah Yup).

<sup>80.</sup> History of the Movement, in PROCEEDINGS AND ADDRESSES: CELEBRATION OF THE BEGINNING OF THE SECOND CENTURY OF THE AMERICAN PATENT SYSTEM AT WASHINGTON CITY, D.C. 3, 3–5 (1892).

<sup>81.</sup> BEAUCHAMP, supra note 26, at 2.

<sup>82.</sup> Otis T. Mason, *The Birth of Invention, in* PROCEEDINGS AND ADDRESSES: CELEBRATION OF THE BEGINNING OF THE SECOND CENTURY OF THE AMERICAN PATENT SYSTEM AT WASHINGTON CITY, D.C. 403 (reprinting Mason's address at the celebration). For Mason's biography, see CURTIS M. HINSLEY, JR., SAVAGES AND SCIENTISTS: THE SMITHSONIAN INSTITUTION AND THE DEVELOPMENT OF AMERICAN ANTHROPOLOGY 1846–1910, at 84–89 (1981).

<sup>83.</sup> See Swanson, Beyond the Progress, supra note 6, at 376–80 (arguing that by the midnineteenth century, patents granted to U.S. citizens were used to claim "inventiveness as a national characteristic").

<sup>84.</sup> Mason, The Birth of Invention, supra note 82, at 406.

<sup>85.</sup> See *id.* (explaining that because "some races" have only marked time, "we now have on the earth types of every sort of culture," including "bits of ancient ingenuity" as collected for the Smithsonian from "the most primitive races").

"most mechanical."<sup>86</sup> Notably absent were any references to the "Anglo-Saxon," "Teutonic," or "Nordic" races, designations used by white U.S. racial theorists to describe men like Mason and themselves, the "civilized" men whose inventiveness was not displayed in museums to demonstrate early human history, but rather recorded in patent models.<sup>87</sup>

Mason's use of inventiveness as a key trait to distinguish so-called human races and rank them on a scale from savage to civilized was in accord with deeply held views about American inventiveness and its relationship to U.S. national success.<sup>88</sup> Mason offered an up-to-date scientific explanation, influenced by Charles Darwin's theory of evolution, for the accepted idea that American inventiveness was exclusively possessed by its white citizens.<sup>89</sup> The racial hierarchy Mason espoused would have been familiar to an audience already exposed to other racial theories of humankind, including older theories promoted by pro-slavery and anti-Black activists and other new theories that, like Mason's, applied evolutionary ideas to human history.<sup>90</sup>

The most prominent of these new theories in turn-of-the-century U.S. was eugenics. In 1883, Darwin's cousin, Francis Galton, had coined the term "eugenics" to refer to the science of improving human populations through selective breeding, with the intent of guiding human evolution like farmers improving their crops and herds.<sup>91</sup> Eugenicists assumed that there was a biological basis for all human traits, desirable and undesirable, and imagined that so-called human "stocks" could be improved by the mating of superior organisms and could degenerate through mating with inferior organisms.<sup>92</sup>

89. HINSLEY, supra note 82, at 91 (noting Mason's reliance on biology, including Darwinism).

90. See STEPHEN JAY GOULD, THE MISMEASURE OF MAN 71–75, 83–85 (rev. & expanded ed. 1996) (summarizing non-evolutionary theories of human difference, including polygenesis).

<sup>86.</sup> OTIS T. MASON, THE ORIGINS OF INVENTION: A STUDY OF INDUSTRY AMONG PRIMITIVE PEOPLES 31 (1895).

<sup>87.</sup> MADISON GRANT, THE PASSING OF THE GREAT RACE 74–76 (1916) (describing the population of the United States at time of founding as "purely Nordic," "purely Teutonic," and "a very large majority being Ango-Saxon").

<sup>88.</sup> See Swanson, Beyond the Progress, supra note 6, at 394–98 (arguing that U.S. leaders thought that inventive people were useful citizens, with the ability to participate in responsibilities of self-governance).

<sup>91.</sup> FRANCIS GALTON, INQUIRIES INTO HUMAN FACULTY AND ITS DEVELOPMENT 17 (1883); DANIEL J. KEVLES, IN THE NAME OF EUGENICS: GENETICS AND THE USES OF HUMAN HEREDITY 3–4 (paperback ed. 1995).

<sup>92.</sup> KEVLES, *supra* note 91, at 47. For additional perspectives on the development of eugenics, see MARK H. HALLER, EUGENICS: HEREDITARIAN ATTITUDES IN AMERICAN THOUGHT 58–62 (1963); Philippa Levine & Alison Bashford, *Introduction: Eugenics and the Modern World, in* THE OXFORD HANDBOOK OF THE HISTORY OF EUGENICS 4–6 (Philippa Levine & Alison Bashford eds., 2012).

Ignoring the shoddy research methods and dubious assumptions that characterized eugenic research, anti-immigrant advocates quickly began to use it to justify immigration restrictions.<sup>93</sup> They argued that, for the good of the nation, additions to its breeding stock (that is, immigrants) should be selected from those so-called races with superior characteristics.<sup>94</sup> The national origin quotas were a population-based approach to excluding the inferior, replacing the time-intensive process of screening each immigrant for defects in themselves or their family tree with wholesale exclusion of groups defined by their biological inferiority.

Eugenicists agreed with Mason that a key distinguishing characteristic was inventiveness. A eugenicist polemic, published in 1916, explained that so-called races could be separated into those who had the "genius" necessary "to invent" and those who could only "imitate or . . . adopt what others have invented . . . "95 As an inherited characteristic, this genius could be lost from a "stock or strain" by unrestricted breeding.<sup>96</sup> In 1919, Eugenical News published research purporting to show that inventiveness was inherited, using oral history to trace inventiveness through multiple generations of one family.<sup>97</sup> The study appeared to suggest that an immigrant (like Pupin) who became a recognized inventor might have the sort of "blood" that would improve, or at least not dilute, the already inventive "native stock." Dr. Harry Laughlin, a prominent eugenicist, testified before Congress in 1924 that immigration procedures should both "sort out inadequates" and look for "positive qualities which the American people . . . prize especially highly."<sup>98</sup> According to Laughlin, such qualities included "inventiveness," an "important quality of the American character" ranked "very high in the[] list of national ideals."99 It was these racialized claims about inventiveness as a group characteristic that defined the border politics of patents Pupin sought

<sup>93.</sup> See KEVLES, supra note 91, at 122 ("[M]uch of what passed as eugenic research was slipshod in method, evidence, and reasoning."). For use of eugenics by anti-immigrant activists, see OKRENT, supra note 47, at 111–12; LEE, supra note 40, at 128–35; DESMOND KING, MAKING AMERICANS: IMMIGRATION, RACE, AND THE ORIGINS OF THE DIVERSE DEMOCRACY 184–90 (2000).

<sup>94.</sup> E.g., KING, supra note 93, at 184–90 (2000).

<sup>95.</sup> GRANT, supra note 87, at 86.

<sup>96.</sup> Id.

<sup>97.</sup> Inventiveness in the Lake Family, EUGENICAL NEWS, Dec. 1919, at 96-97.

<sup>98.</sup> Europe as an Emigrant-Exporting Continent and the United States as an Immigrant-Receiving Nation: Hearings Before the Comm. on Immigr. & Naturalization H.R., 68th Cong. 1272 (1924) (statement of Dr. Harry H. Laughlin); see also KING, supra note 93, at 173 (noting that Laughlin collected research "about the eugenic characteristics of immigrants and potential immigrants" for the committee from 1920 to 1931).

<sup>99.</sup> Europe as an Emigrant-Exporting Continent and the United States as an Immigrant-Receiving Nation, supra note 98.

to influence. He wanted to use his life story to argue against group-based exclusions, demonstrating that a penniless boy from anywhere might have the right sort of "blood."

In the end, eugenic ideas helped convince Congress that group exclusions, using national origins as a proxy for race, were the best way of preserving "America for Americans."<sup>100</sup> Pupin's failure to halt the trend toward the "law of restriction," however, did not end the role of patents and inventors in immigration debates.

#### B. The Persistence of the Immigrant Inventor

The congressional session that convened in December 1925 "received the greatest flood of immigration bills yet faced by any session of Congress," a "heavy load" that continued through the 1920s as both proponents and opponents of immigration sought to amend the Immigration Act of 1924.<sup>101</sup> While remaining committed to immigration restriction, the U.S. has debated the best means of doing so ever since.<sup>102</sup> In these ongoing debates, the immigrant inventor has had multiple political uses.

Pupin's successful autobiography helped launch a new biographical subgenre, offering the life stories of European immigrant inventors to argue against immigration restrictions.<sup>103</sup> These stories of individual immigrant

<sup>100.</sup> LEE, supra note 40, at 6 (noting uses of this anti-immigrant slogan in 1910s and 20s).

<sup>101.</sup> HUTCHINSON, supra note 40, at 196, 202.

<sup>102.</sup> See JIA LYNN YANG, ONE MIGHTY AND IRRESISTIBLE TIDE: THE EPIC STRUGGLE OVER AMERICAN IMMIGRATION, 1924–1965, at 4 (2020) (describing "decades-long struggle" to overturn the 1924 Act, fought by Jewish, Irish Catholic, and Asian immigrants and their descendants); Aristide R. Zolberg, *Immigration Control Policy: Law and Implementation, in* THE NEW AMERICANS: A GUIDE TO IMMIGRATION SINCE 1965, at 29, 30–41 (Mary C. Waters & Reed Ueda eds., 2007) (summarizing U.S. immigration debates from 1965 to 2005).

<sup>103.</sup> For examples, see Readers' Guide to New Books, S.F. CHRON., Nov. 7, 1926, at F5 (describing biography of Emile Berliner as "[a]n inspirational biography of another of those inventive immigrants who have come as poor boys to the United States and have risen high in the scientific world") and multiple editions of Our Foreign-Born Citizens: What They Have Done for America by Annie E.S. Beard, which include a shifting list of immigrant inventors among those profiled, starting with eight out of thirty-four profiles in the first edition. ANNIE E.S. BEARD, OUR FOREIGN-BORN CITIZENS: WHAT THEY HAVE DONE FOR AMERICA (1st ed. 1922); ANNIE E.S. BEARD, OUR FOREIGN-BORN CITIZENS: WHAT THEY HAVE DONE FOR AMERICA (rev. 2d ed. 1932); ANNIE E.S. BEARD, OUR FOREIGN-BORN CITIZENS: WHAT THEY HAVE DONE FOR AMERICA (rev. 3d ed. 1939); ANNIE E.S. BEARD, OUR FOREIGN-BORN CITIZENS: WHAT THEY HAVE DONE FOR AMERICA (rev. 4th ed. 1946); ANNIE E.S. BEARD, OUR FOREIGN-BORN CITIZENS: WHAT THEY HAVE DONE FOR AMERICA (rev. 5th ed. 1955); ANNIE E.S. BEARD, OUR FOREIGN-BORN CITIZENS (rev. 6th ed. 1968). Note that Beard's book did not include an immigrant from outside Europe until the fifth edition. See also William A. Fahey, Preface of ANNIE E.S. BEARD, OUR FOREIGN BORN CITIZENS, at vi (rev. 5th ed. 1955) (describing the profiled Dr. Hideyo Noguchi as "a Japanese-born scientist of genius").

inventors offered two forms of rebuttal to racialized categories of exclusion. First, the existence of inventors with "national origins" in countries whose residents were classified as part of an inferior racial group was evidence that these groups too contained intelligent and inventive members. This evidence suggested that using inventive ability to separate human races was incorrect as a matter of biology, and thus, such national origin restrictions were not needed to protect "native stock."<sup>104</sup> Second, the progress of some arrivals "from immigrant to inventor" also supported the claim-made by many opponents of immigration restriction-that "Americanization" was possible, even into this most American of occupations.<sup>105</sup> These advocates argued that any immigrant could assimilate, if provided the correct education.<sup>106</sup> Both prongs of advocacy against national origin quotas used the immigrant inventor as a means of demonstrating that those like Pupin could become the same sort of useful citizens as previous Americans, able to originate ideas and participate in democratic self-governance, whether or not they also invented.

By the end of World War II, international outrage about the use of eugenic theory to justify genocide by Nazi Germany created a powerful backlash against eugenics,<sup>107</sup> but the U.S. policy of picking among potential immigrants based on national origin continued, as did immigration debates. Pupin once again became the public face of the "immigrant inventor" as *From Immigrant to Inventor* was reissued in 1949 for a new generation. Newspaper readers learned of Pupin's life story as an example both of "the great contributions to American progress made by our foreign-born citizens" and of the freedom the U.S. offered its citizens "to pursue our own way and to enjoy the fruits of our labor."<sup>108</sup> At the beginning of the Cold War, as the Soviet Union was establishing control over eastern Europe (including Pupin's homeland), Pupin's autobiography demonstrated how immigrants brought inventiveness into the U.S. and how U.S. law supported innovation

<sup>104.</sup> *Cf.* FREDERIC WILLIAM WILE, EMILE BERLINER: MAKER OF THE MICROPHONE 21 (1926) (criticizing current U.S. immigration policy for distinguishing among "Nordics, Latins or Orientals").

<sup>105.</sup> See, e.g., JEFFREY E. MIREL, PATRIOTIC PLURALISM: AMERICAN EDUCATION AND EUROPEAN IMMIGRANTS 4–6 (2010) (defining "Americanization" and tracing the history of Americanization efforts in the first half of the twentieth century, highlighting those who believed that all immigrants could "become good Americans"); KING, *supra* note 93, at 87–89 (tracing government efforts to Americanize immigrants through education).

<sup>106.</sup> MIREL, supra note 105, at 6, 15.

<sup>107.</sup> KEVLES, supra note 91, at 118.

<sup>108.</sup> Mat, *Our Democracy*, MARION PROGRESS (N.C.), Aug. 25, 1949. The same graphic was also printed in *The Durant News* (Miss.), Aug. 25, 1949, at 1; *The Lexington Advertiser* (Miss.), Aug. 25, 1949, at 4; *The Smyrna Times* (Del.), Mar. 9, 1950, at 2.

by allowing inventors to reap monetary benefits through patents in ways that Soviet inventors could not.<sup>109</sup> The lesson conveyed was that the U.S. legal system—part of what Americanization classes were designed to explain—in combination with what an enthusiast for immigrant inventors called "an amalgam [of ethnicities] which is peculiarly American," maintained U.S. inventiveness.<sup>110</sup>

The descriptor "immigrant inventor," which had emerged in the immigration debates of the early twentieth century, remained a popular way of describing anyone who had both immigrated to and patented in the U.S. In the 1940s and 1950s, the term expanded to include men who had a patented invention but were considered newsworthy for some other activity, such as becoming ambassador to Bolivia, building a new steel processing plant, or trying to buy their siblings out of communist Czechoslovakia.<sup>111</sup> Their status as "immigrant inventor," proven by their patented inventions, was considered relevant to how the U.S. public should judge their qualifications and contributions in other aspects of their lives. Such men were not candidates for the canon of great American inventors but rather additional examples of immigrants who had become successful U.S. citizens in defiance of the racialized assumptions underlying the national origin quotas. Twentieth-century immigration restrictions kept the immigration status of U.S. inventor-patentees perpetually relevant.

III. The End of National Origin Quotas and the New Border Politics of Patents

# A. The Immigrant Inventor in a New Era

In 1952, Congress rewrote U.S. immigration law. Despite decades of advocacy against quotas, Congress retained the national origin quotas, overriding a presidential veto to do so.<sup>112</sup> Supporters of immigration reform

<sup>109.</sup> See Jocelyn Bosse & Johanna Dahlin, Spectres of Intellectual Property in the Soviet Union: The Development and Recognition of the Inventor's Certificate, 17 PóLEMOS 293, 293–94 (2023) (stating that after 1917, the Soviets "nationalised all inventions and repealed the patent law").

<sup>110.</sup> See Foreword to WILE, supra note 104 ("From the melting-pot which is the modern United States there has emerged an amalgam which is peculiarly American—an aristocracy of inventive genius."); MIREL, supra note 105, at 174–75 (describing introduction to American legal system as part of citizenship education).

<sup>111.</sup> E.g., Immigrant Inventor Named Ambassador, OMAHA WORLD-HERALD (Neb.), Nov. 20, 1949, at 17-A; Anthony G. Zoppi, New Era in Steelmaking Promised by Longview Man, DALLAS MORNING NEWS (Tex.), Feb. 26, 1951, at 6; Inventor Leaves \$500,000 to Free Kin from Reds, CINCINNATI POST (Ohio), Oct. 22, 1954, at 8.

<sup>112.</sup> Immigration and Nationality Act of 1952, ch. 477, § 201(a), 66 Stat. 163, 175; *see also* HUTCHINSON, *supra* note 40, at 307, 312 (explaining the veto and override).

gained a prominent ally, however, in then-U.S. senator and future president John F. Kennedy.<sup>113</sup> Kennedy sought to shift public attitudes with his book, *A Nation of Immigrants*, published in 1958.<sup>114</sup> The book extolled the ways in which immigrants, including Irish Catholics like Kennedy's ancestors, had contributed to the U.S.<sup>115</sup> Like earlier advocates for less restrictive immigration, Kennedy used the immigrant inventor to bolster his argument, reminding his readers of Ericsson, Bell, and Pupin, among others.<sup>116</sup> Just as in the 1920s, in ways disproportionate to the modest number of foreign-born U.S. inventor-patentees, the immigrant inventor was a political tool in a quest to replace racialized quotas.

After Kennedy's presidency was cut short by his assassination, his brother, Senator Edward Kennedy, assisted passage of the Immigration Act of 1965.<sup>117</sup> The new law, while continuing to restrict immigration, heralded a new approach.<sup>118</sup> It allocated quotas by hemisphere, and then (originally only in the eastern hemisphere) placed a cap of 20,000 immigrants per year from any one country, untethering quotas from the census of 1890 and thereby removing the statutory preference for immigrants from western Europe.<sup>119</sup> The 1965 Act profoundly changed immigration in the U.S., increasing both the annual number of immigrants and the source countries. By 2017, over thirteen percent of the U.S. population was foreign-born, far in excess of the less than five percent of the population that was foreign-born in 1965.<sup>120</sup> The sending nations shifted from predominantly European

<sup>113.</sup> For discussions of John F. Kennedy's legislative advocacy for immigration reform as a senator and president, see HUTCHINSON, *supra* note 40, at 330–32, 339, 342, 350, 357, 359 and BON TEMPO & DINER, *supra* note 22, at 247.

<sup>114.</sup> JOHN F. KENNEDY, A NATION OF IMMIGRANTS (1958).

<sup>115.</sup> See Robert F. Kennedy, *Introduction* to JOHN F. KENNEDY, A NATION OF IMMIGRANTS ix, ix–xi (rev. & enlarged ed. 1964) (noting Kennedy's immigrant ancestors and explaining that the book highlights immigrants' contributions to U.S.).

<sup>116.</sup> KENNEDY, *supra* note 114, at 65–66; *see also* John Harmon Burma, *Some Cultural Aspects* of *Immigration: Its Impact, Especially on Our Arts and Sciences*, 21 LAW & CONTEMP. PROBS. 284, 290 (1956) (listing immigrants, including inventors, who contributed to U.S.).

<sup>117.</sup> Immigration and Nationality Act of 1965, Pub. L. No. 89-236, 79 Stat. 911. For discussion of Edward Kennedy as floor manager, see HUTCHINSON, *supra* note 40, at 376.

<sup>118.</sup> See HUTCHINSON, supra note 40, at 377 ("The 1965 Act was, obviously, a turning point in American immigration policy . . . ").

<sup>119.</sup> Immigration and Nationality Act of 1965, Pub. L. No. 89-236, 79 Stat. 911; *see also* BON TEMPO & DINER, *supra* note 22, at 260 (noting the main features of the 1965 Act).

<sup>120.</sup> Maria Cristina Garcia & Maddalena Marinari, *Introduction* to WHOSE AMERICA? U.S. IMMIGRATION POLICY SINCE 1980, at 1, 2 (Maria Cristina Garcia & Maddalena Marinari eds., 2023).

countries to those in Asia, Latin America, and Africa.<sup>121</sup> These changes have kept immigration policy a volatile subject, with disagreements about undocumented immigrants, refugee and asylum policy, and the labor market effects of immigration.<sup>122</sup>

Within each country quota, visas have been allocated based on a shifting preference system that has prioritized two groups: those with U.S. family members and those with certain skills.<sup>123</sup> With an emphasis on skills-based selection, the U.S. has added identifying those preferentially includable to its previous approach of identifying excludable groups (e.g., the "feeble-minded").<sup>124</sup> When selecting among applicants for employment-based preferences, rather than relying on "blood," the 1965 Act asked bureaucrats to consider achievements.<sup>125</sup> In later decades, the U.S. created the non-immigrant H1-B and (less frequently used) O-1 visa programs, allowing foreign nationals to enter the U.S. to work when they possess skills not available domestically, including those who show "extraordinary ability in the sciences."<sup>126</sup> Although these visas are temporary, the U.S. allows those on such visas to apply for permanent residency while working in the U.S., creating another path to citizenship.<sup>127</sup>

<sup>121.</sup> *Id.*; *see also* BON TEMPO & DINER, *supra* note 22, at 273–74 (detailing how the region of origin of U.S. immigrants has shifted from the 1960s through the 1990s); LEE, *supra* note 40, at 248 (discussing the shift in immigration between the Western and Eastern hemispheres as a result of the 1965 act).

<sup>122.</sup> See Zolberg, supra note 102 at 31–41 (summarizing U.S. immigration debates from 1965 to 2007).

<sup>123.</sup> Immigration and Nationality Act of 1965, Pub. L. No. 89-236, 79 Stat. 911. See MARGARET SANDS ORCHOWSKI, THE LAW THAT CHANGED THE FACE OF AMERICA: THE IMMIGRATION AND NATIONALITY ACT OF 1965, at 83–84 (2015) (explaining that up to 80% of legal permanent resident status ("green cards") were given based on kinship and about 20% based on work skills).

<sup>124.</sup> *See* HUTCHINSON, *supra* note 40, at 405, 494–98 (noting earlier domination of selective exclusion approach while also explaining that since the Chinese Exclusion Act of 1882, U.S. immigration laws have provided exceptions from exclusions for certain occupational classes). For current grounds of inadmissibility, see 8 U.S.C. § 1182 (creating inadmissible categories based on health, criminal history, and insufficient economic resources, among other categories).

<sup>125.</sup> Immigration and Nationality Act of 1965, Pub. L. No. 89-236, 79 Stat. 911.

<sup>126.</sup> Immigration Act of 1990, Pub. L. No. 101-649, § 205(c), § 207(a)(3), 104 Stat. 4978, 5020–25 (codified as amended at 8 U.S.C. § 1101(a)(15)(H)(i)(b); § 1101(a)(15)(O)(i)). Current preferences include "[o]utstanding professors and researchers," those with "extraordinary ability" in "the sciences, arts, education, business, or athletics," and "[c]ertain multinational executives and managers." 8 U.S.C. § 1153(b)(1).

<sup>127.</sup> Kerr, *supra* note 3, at 17 (explaining how H1-B visas are "dual intent," allowing application for permanent legal residency (a "green card") and how the United States makes it easy for green card holders to apply for citizenship and expects them to do so); ORCHOWSKI, *supra* note 123, at 85, 95–96 (same).

These preferences allow applicants to argue that their inventive ability makes them worthy of admission to the U.S. Neither Bell nor Pupin, however, would have been able to make such an argument, since they invented and patented *after* immigrating. The skills-based preferences are an *ex post* selection of those already proven to have identified skills. Further, although patents can be "evidence of the alien's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field," the immigration service has not been easily swayed by patent evidence.<sup>128</sup> A patent might certify a would-be immigrant as an "inventor," but that is not enough to grant them immigrant status. In the new border politics of patents, the "immigrant inventor" has remained a category that describes those who invent and patent *after* they enter the U.S. While still considered relevant to immigration debates, in the twenty-first century immigrant inventors are now most often discussed not through individual life stories but rather through collective patent counts.

# B. Patent Counts and American National Identity

One hundred years after Congress collected testimony on inventiveness as a "prized" national quality relevant to immigration restrictions, nativeborn Americans perceive immigrants who gain wealth through invention as "American" in ways that other immigrant workers are not.<sup>129</sup> They might even be heroicized as *Time Magazine*'s "Person of the Year" and chosen as a right-hand advisor to the president.<sup>130</sup> Like Pupin, immigrant entrepreneur

<sup>128.</sup> See 8 C.F.R. § 204.5(h)(3), (i)(3) (2024) (outlining types of initial evidence required for "[a]liens with extraordinary ability" or "[o]utstanding professors and researchers"); see also Melanie Gurley Keeney & Susan Cho Figenshau, *Employment-Based Immigration*, ST. LOUIS BAR J., Winter 1996, at 26, 26, 28–29 (discussing types of skills-based preferences and applicable evidence); In re [redacted], No. LIN 07-062-52788, at 7–8 (U.S. Citizenship & Immigr. Servs. Oct. 27, 2009) (citing N.Y. State Dep't of Transp., No. EAC 96-063-51031, at 221, 221 n. 7 (Aug. 7, 1998)) (denying immigrant visa petition and explaining that "a patent is not necessarily evidence of a track record of success with some degree of influence over the field as a whole"); Hsiao v. Hazuda, 98 F. Supp. 3d 1093, 1097, 1099, 1102 (C.D. Cal. 2015) (finding no legal error in the denial of plaintiff's I-485 petitions based on the fact that his previous I-140 petitions were rejected because evidence of two patents was not sufficient to show that they were of "high importance").

<sup>129.</sup> See Maxwell, supra note 9, at 239–40, 251, 253 (reporting that Americans consider entrepreneurs and inventors as the most "quintessentially American" occupations).

<sup>130.</sup> Edward Felsenthal, 2021 The Choice: Elon Musk, TIME MAG. (Dec. 13, 2021), https://time.com/person-of-the-year-2021-elon-musk-choice/ [https://perma.cc/PJS7-BNVH]; Maggie Haberman, Jonathan Swan, Charlie Savage & Theodore Schleifer, Musk Is Likely to Get a West Wing Office for His Cost-Cutting Project, N.Y. TIMES (Jan. 20, 2025), https://www.nytimes.com/2025/01/20/us/politics/elon-musk-office-west-wing.html [https://perma .cc/3TBV-5D27]; Shira Ovide, The Myth of the Genius Tech Inventor, N.Y. TIMES (May 8, 2022),

and inventor Elon Musk has used his fame to intervene in immigration debates.<sup>131</sup> Yet it is as a group, rather than as individuals, that immigrant inventors have achieved the most political salience in the twenty-first century. Empirical researchers have used U.S. patents to count immigrant inventors and sort them by ethnicity.<sup>132</sup> Politicians and business leaders then mobilize these data as part of the politics of the border, claiming a "crucial" role for immigrants in U.S. innovation.<sup>133</sup> A review of this scholarship in 2021 concluded that "immigration . . . increases innovation, firm startups, and general economic dynamism" and that "[h]igh-skilled immigrants make native innovators more productive," arguing for "[e]xpanding immigration

https://www.nytimes.com/2022/05/04/technology/myth-of-the-genius-tech-inventor.html [https:// perma.cc/KXK4-WWJ8] (describing Musk as "a great inventor"); *cf.* Jess Bidgood, *Taking a Page from Trump's Book*, N.Y. TIMES (Mar. 19, 2025), https://www.nytimes.com/2025/ 03/19/us/politics/tim-walz-elon-musk-democrats-immigration .html [https://perma.cc/KD6G-YCXA] (noting the growing tendency to cast Musk as "a foreign interloper").

<sup>131.</sup> See Ryan Mac & Ken Bensinger, *Trump Backers Battle Online Over Skilled Immigrants*, N.Y. TIMES (Dec. 27, 2024), https://www.nytimes.com/2024/12/27/technology/trump-musk-immigration-h1b-visa.html [https://perma.cc/27V9-5GD5] (describing Musk's support of H-1B visas and criticism of "illegal immigration").

<sup>132.</sup> See William R. Kerr & William F. Lincoln, The Supply Side of Innovation: H-1B Visa Reforms and U.S. Ethnic Invention, 28 J. LAB. ECON. 473, 493-94 (2010) (correlating Chinese and Indian ethnicity of U.S. inventor-patentees with H-1B visas); Jennifer Hunt & Marjolaine Gauthier-Loiselle, How Much Does Immigration Boost Innovation?, AM. ECON. J. MACROECONOMICS, Apr. 2010, at 31, 32-33 (using U.S. patents per capita from 1940 to 2000 to argue that immigrants contribute disproportionately to innovation); William R. Kerr, The Ethnic Composition of US Inventors 1-2 (Harv. Bus. Sch., Working Paper No. 08-006, 2008) (using ethnic-name database to measure the number of patents granted to inventors of specific ethnicities and how those numbers have changed over time); Paula E. Stephan & Sharon G. Levin, Exceptional Contributions to US Science by the Foreign-Born and Foreign-Educated, 20 POPULATION RSCH. & POL'Y REV 59, 65-66, 75 (2001) (using highly cited patents as one type of evidence for the claim that immigrants contribute disproportionally to U.S. science); see also Petra Moser, Alessandra Voena & Fabin Waldinger, German Jewish Émigrés and US Invention, 104 AM. ECON. REV. 3222, 3224–26 (2014) (arguing that German Jewish immigrant chemists increased U.S. invention after 1933); Petra Moser & Shmuel San, Immigration, Science and Invention: Lessons from the Quota Acts 19-20 (Mar. 21, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3558718 (arguing that the national origin quotas depressed the inventiveness of U.S. firms).

<sup>133.</sup> Andrew Martin, *Immigrants Are Crucial to Innovation, Study Says*, N.Y. TIMES (June 25, 2012), https://www.nytimes.com/2012/06/26/business/immigrants-played-role-in-majority-of-us-technical-patents-study-finds.html [https://perma.cc/9V6J-2JL3]; *Press Release: New Study Reveals Immigrants Are Behind More than Three-Quarters of Patents from Top Ten Patent-Producing American Universities*, PARTNERSHIP FOR A NEW AMERICAN ECONOMY (June 26, 2012), https://www.newamericaneconomy.org/news/press-release-new-study-reveals-immigrants-behind-three-quarters-patents-top-ten-patent-producing-american-universities/ [https://perma.cc/F8D2-J5GZ] (summarizing findings of new study and using the results to advocate for immigration reform for STEM graduates). The Partnership for a New American Economy describes itself as "a group of more than 450 Republican, Democratic, and Independent mayors and business leaders ....." *Id.* 

[as] a desirable policy reform."<sup>134</sup> Underlying such arguments is an assumption of the universality of inventiveness as a human trait that might vary among individuals but is not correlated with identifiable biologically defined groups. Advocates seek to increase immigration by those planning to study in STEM fields or to work in STEM jobs, arguing that the historic data about immigrant inventors demonstrate that such preferences will contribute to U.S. inventiveness and innovation.<sup>135</sup>

Such advocates are marshalling patent evidence because their chosen policy position is fiercely opposed by others. Arguments that mental ability, including inventiveness, is correlated with racialized human groups have not disappeared but rather continue to emerge in discussions of immigration policy.<sup>136</sup> The immense popularity of *The Bell Curve* (1994), a bestselling book that argued that science demonstrated inherited racialized differences in human intelligence, returned the claims of racial science to public debates about the future of the U.S.—a debate that had everything to do with the changing face of the U.S. due to immigration.<sup>137</sup> The authors of *The Bell Curve* argued that immigration makes "a difference to ... the national distribution of intelligence" because immigrants of different national origins (which the authors called "ethnic ancestry") have different average

<sup>134.</sup> Krol, *supra* note 12, at 566.

<sup>135.</sup> See Kerr, supra note 3, at 28–29, 31 (arguing that expanding visa programs for high-skilled workers and students will boost innovation); Krol, supra note 12, at 560, 563–66 (arguing that immigrants with STEM degrees are particularly innovative and a "complement to native inventors").

<sup>136.</sup> See LEE, supra note 40, at 322–25 (discussing modern xenophobia and arguments that immigrants from some countries are preferable to those from others); JONES, supra note 40, at 3–4 (discussing white nationalist anti-immigrant interest groups). For the social science literature informing these discussions, see, for example, Arthur Jensen, *How Much Can We Boost IQ and Scholastic Achievement*?, 39 HARV. EDUC. REV. 1, 81–82 (1969) (arguing that Black Americans have lower intelligence than white Americans due to biological differences); S.C. Gilfillan, *Some Racial Comparisons of Inventiveness*, 9 MANKIND Q. 120, 124–25 (1969) (using patent records, among other evidence, to argue that the "White race" is the most inventive); MICHAEL E. STAUB, THE MISMEASURE OF MINDS: DEBATING RACE AND INTELLIGENCE BETWEEN *BROWN* AND *THE BELL CURVE* 4–6 (2018) (reviewing psychological studies between 1954 and 1994 that argued for racialized intelligences).

<sup>137.</sup> See RICHARD J. HERRNSTEIN & CHARLES MURRAY, THE BELL CURVE: INTELLIGENCE AND CLASS STRUCTURE IN AMERICAN LIFE 358–59 (1994) (tying arguments about race and IQ to the influx of immigration in the 1980s and consequent debates); Steven J. Gould, *Mismeasure by Any Measure*, *in* THE BELL CURVE DEBATE: HISTORY, DOCUMENTS, OPINIONS 3, 3–7 (Russell Jacoby & Naomi Glauberman eds., 1995) (placing *The Bell Curve* in historical perspective with reference to earlier discredited racial science and criticizing the book's arguments and presumptions); *cf.* Maxine S. Seller, *Historical Perspectives on American Immigration Policy: Case Studies and Current Implications*, L. & CONTEMP. PROBS., Spring 1982, at 137, 161 (relating controversy about Jensen's publication, *supra* note 136, to immigration policy).

intelligence, as measured by IQ tests.<sup>138</sup> Eugencists had similarly used early IQ tests to demonstrate the devasting results of what they considered the recent "dilution" of U.S. "native stock" by immigrants.<sup>139</sup> Although we now more often discuss the "immigrant inventor" *en masse* via patent data rather than via individual "inspirational" stories,<sup>140</sup> such data collection projects demonstrate the continued border politics in which patents are mobilized as proxies for both the inventive ability of immigrant groups and their worthiness to become Americans. Counting "immigrant inventors" demonstrates not just the possibility of increased U.S. innovation, but also the capacity of immigrants to contribute to the "bell curve" of American ability and to a citizenry capable of performing all the necessary social and political roles.

#### Conclusion

U.S. residents have gone from ignoring the birth country of U.S. inventor-patentees like Bell, to celebrating immigrant inventors like Pupin, to measuring immigrant inventors by counting U.S. patents granted to the foreign-born. These changes reflect not changing patent laws, but rather changing immigration policies. Identifying immigrant inventors became relevant once the U.S. began to turn to immigration restrictions and has remained part of the politics of choosing among potential immigrants. This Essay has argued that the attention to the "immigrant inventor" as a political category had its origins in turn-of-the-twentieth-century racial science, and its persistence reflects the persistence of attempts to base immigration policy on racialized sorting of human groups based on innate ability. As evolutionary biologist Stephen Jay Gould observed, the recurrence of attempts to justify such sorting has been driven by politics rather than the emergence of new scientific research.<sup>141</sup> Gould, who devoted decades to

<sup>138.</sup> HERRNSTEIN & MURRAY, *supra* note 137, at 358–61. *The Bell Curve* elicited organized responses refuting its premises. *See generally* THE BELL CURVE DEBATE: HISTORY, DOCUMENTS, OPINIONS (Russell Jacoby & Naomi Glauberman eds., 1995) (collecting numerous responses, reviews, criticisms, opinions, and commentaries on *The Bell Curve*); *see also* GOULD, *supra* note 90, at 35 (describing the author's decision to produce a revised version of his work in response to *The Bell Curve*).

<sup>139.</sup> See Robert M. Yerkes, Eugenic Bearing of Measurements of Intelligence in the United States Army, 14 THE EUGENICS REV. 225, 242 (1923) (using Army test data to argue for differing intelligence of U.S. immigrant groups); CARL C. BRIGHAM, A STUDY OF AMERICAN INTELLIGENCE xx–xxi (1923) (same); see also OKRENT, supra note 47, at 318–22 (explaining origins and use of Army intelligence tests); KEVLES, supra note 91, at 79, 82–83 (same).

<sup>140.</sup> *E.g., Readers' Guide to New Books, supra* note 103 (announcing the publication in 1926 of an "inspirational biography" of an "inventive immigrant").

<sup>141.</sup> GOULD, supra note 90, at 27-28.

debunking biological determinist arguments about human groups, noted that such recurrences are "cyclical."<sup>142</sup> The association of inventiveness with Americanness, however, has proven constant. The participants at the patent centennial celebration in 1891, the eugenicist Laughlin testifying before Congress in 1924, and the respondents who identified quintessentially American occupations in the 2010s all agreed: U.S. residents place a high value on inventive ability and consider "inventor" to be an occupation more reflective of U.S. national identity than almost any other. The combination of this constant belief and the cyclic recurrence of racial science in immigration debates has resulted in a border politics of patents that give "immigrant inventors" a greater role than their numbers might suggest is warranted.

Are there lessons to be gleaned from recognizing this form of the border politics of patents? Does it matter that Bell's foreign birth has been both largely ignored and occasionally emphasized in support of immigration reform? After all, although Bell used his patents to found the long-lasting American Bell Telephone corporate empire,<sup>143</sup> his inventiveness did not make him a markedly superior U.S. citizen. Bell used his fame to promote eugenic ideas that remain deeply troubling to the U.S. deaf community and retreated to Canada to live out his days.<sup>144</sup>

Bell, as inventor and innovator, and as citizen and celebrity, is certainly worth remembering. Pupin, too, although no longer a celebrity, is a rewarding object of study.<sup>145</sup> But it is also worth asking whether and how one or two highly successful immigrant inventor-patentees—or even the hundreds of immigrants who have received U.S. patents—should be more politically relevant than thousands of immigrant health care workers or farmers. The lone inventor hero—Bell foremost among them—has been used to obscure the dominance in the U.S. patent system of large multinational corporations

<sup>142.</sup> Id. at 28.

<sup>143.</sup> BEAUCHAMP, supra note 26, at 8.

<sup>144.</sup> See Brian H. Greenwald & John Vickrey Van Cleve, "A Deaf Variety of the Human Race": Historical Memory, Alexander Graham Bell, and Eugenics, 14 J. GILDED AGE & PROGRESSIVE ERA 28, 29, 38–39, 42–43 (2015) (reviewing scholarly criticism of Bell's studies of hereditary deafness and his links to eugenics and arguing that Bell eventually changed his views); GRAY, supra note 15, at 402, 421–23 (describing Bell's "long summers" spent in Nova Scotia, Canada, as well as his death and burial there).

<sup>145.</sup> See generally Brittain, supra note 37 (exploring the "persistent myth" regarding Pupin's role in inventing the loading coil); Edward Ifkovic, South-Slavic American Autobiography: Three Variations, MELUS, Summer 1983, at 49 (analyzing Pupin's autobiography as ethnic literature).

and the realities of simultaneous and group invention.<sup>146</sup> The immigrant inventor, used as a measure of immigrant contribution to American society and economy, similarly obscures the multiple other skills given preference by immigration laws and the breadth of immigrant economic contributions. Inventor-patentees remain relatively rare among immigrants, just as among the general population.<sup>147</sup> This historical review reminds us that when the "immigrant inventor" becomes part of U.S border politics, the debate, whether explicitly or implicitly, may be slipping into arguments about whether ability-to originate, to invent, to contribute, to live as a productive citizen ready to vote and take office—is more prevalent in some groups than others as a matter of immutable biology. Discussions of the "immigrant inventor" can be exciting, inspiring, and useful to understand U.S. innovation. They may also signal a "cyclic recurrence" of discredited racialized thinking about human groups and abilities, a warning to avoid basing legal reform on the latest version of, in Gould's phrase, the "mismeasure of man."148

<sup>146.</sup> See BEAUCHAMP, supra note 26, at 7 (arguing that although Bell is "sometimes seen as an archetype of the individual inventor," he and his patents actually represented "the growing use of intellectual property by large corporations"); Jessica Silbey, *The Mythical Beginnings of Intellectual Property*, 15 GEO. MASON L. REV. 319, 336, 338–39 (2008) (contrasting myth of individual inventor with reality that inventors work in teams); Mark A. Lemley, *The Myth of the Sole Inventor*, 110 MICH. L. REV. 709, 710, 712–13, 720–22, 749 (2012) (arguing that the telephone, like almost all important inventions, was simultaneously invented by more than one person and that the "myth of the sole inventor" obscures "the realities of innovation"); Kara W. Swanson, "*Great Men,*" *Law, and the Social Construction of Technology*, 43 LAW & SOC. INQUIRY 1093, 1094–95, 1098–100 (2018) (reviewing literature that seeks to "unsettle" narratives of the "great man" or "lone inventor").

<sup>147.</sup> But see Krol, supra note 12, at 551 (arguing that immigrants "account for a large share" of U.S. patents).

<sup>148.</sup> GOULD, supra note 90.