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## EMORY JOHNSON AND THE RISE OF ECONOMIC EXPERTISE IN THE PROGRESSIVE STATE, 1898–1913

Emory Johnson served in a series of executive-branch appointments pertaining to the Panama Canal. Like many other executive experts, he used his professional skills and reputation as political tools, promoting the canal and bringing its toll-making under his control. His activities diverged from what scholars have described as other experts' practice of gaining influence by insulating themselves from the preceding era's partisan politics, however. An avowed Republican, he worked in collaboration with appointed officials and lobbied members of the public and Congress alike. Although he presented economic data as objective fact, his persuasive efforts drew heavily on an often-forgotten strand of the party's ideological tradition. It paradoxically promoted transportation projects simultaneously in associative terms, as using the market to secure the Union, and as benefiting the divergent interests of competing individual localities. Johnson's work reveals a professional in the federal government as a more multidimensional historical figure than that which appears in accounts describing experts as symbols of an undemocratic administrative state, illustrating a complex set of ties between the preceding period's political beliefs and practices and the rise of an administrative state.

Emory Johnson began his service to the federal government when he joined the team of scholars recruited by the United States Industrial Commission in 1898. President William McKinley had asked the Commission to examine and report on what one observer termed "this new and strange industrialism" and its impact on American society.<sup>1</sup> The body, comprised of nine congressmen and nine private citizens, quickly found itself floundering. None of its members possessed a detailed knowledge of the individual industries and other topics that they had been asked to study. An economist at the University of Pennsylvania's Wharton School of Business specializing in transportation matters, Johnson readily provided the commissioners with a sense of the major problems confronting the nation's rail and water carriers. The young professor immediately found his services to be in considerable demand. He had not even completed his work for the Industrial Commission when he received an appointment to the Isthmian Canal Commission of 1899–1902. Retaining his position at the Wharton School throughout his federal service, he in 1910 returned to the subject of the then nearly completed project to serve as special commissioner for Panama Canal Traffic and Tolls. Like many other professionals working in the Progressive State, Johnson often condemned Democratic politics and used his expert skills, knowledge, and reputation to find increasing levels of autonomy and influence there.<sup>2</sup> Yet his career also reveals a very different aspect of professional expertise's emergence in the federal government in this period. He gained his appointments and consolidated his authority as a loyal Republican, and proved himself to be well-acquainted with the practices of partisan, democratic politics in several respects. Focusing his critique of popular government on Congress, he worked

closely with senior appointees in the McKinley and Taft administrations, providing reports and testimony to lawmakers and lobbying them directly to win their approval for the canal and bring a completed project under expert, executive authority. He laid out a case for the canal rooted in his party's ideological tradition, and even used a series of personal appearances around the nation to attempt to persuade representatives of local interests to support the canal and what he and his allies took to be its proper administration. In each case expertise provided Johnson with political capital that allowed him to bring familiar political beliefs and dynamics to bear on behalf of an administrative state that would supposedly supplant them.

Scholars have often concluded that professional experts' work in the Progressive State represented a fundamental departure from the preceding century's political dynamics, creating a largely undemocratic governmental apparatus that controlled specific aspects of federal policy making.<sup>3</sup> Daniel Carpenter has showed how professionals employed in bureaucratically organized agencies that emerged in the executive branch in this period won the autonomy and influence necessary to build this apparatus by using their skills, knowledge, and reputation to insulate themselves from elected officials, even as they aligned themselves with new interest groups.<sup>4</sup> Johnson created a very different variety of expertise in the federal government in part because he worked in a fundamentally different institutional context. Unlike the professional social scientists that Carpenter and others have described, Johnson served in a series of temporary appointments. In doing so he participated in a phenomenon that a recent work has called "statebuilding from the margins," in which political actors from outside the federal government took on new roles within it and pressed their agendas on federal officials, "offering their own privately developed capacity to bolster the state's capability to achieve their desired policy outcomes."<sup>5</sup> Philadelphia Republicans helped Johnson to secure two of his appointments, but his arguments and activities identified him as more than a mere placeman.<sup>6</sup> They made him a professional engaged with one of the major intellectual traditions influencing his discipline. Although intellectual historians and students of American political thought have described the Republican Party and its political ideology's influence on the first generations of American professional social scientists that emerged in this period, work examining the roles that many of these experts played in the Progressive State has often overlooked these connections.<sup>7</sup>

Dorothy Ross, Mary O. Furner, and Eldon Eisenach have shown that many social scientists of Johnson's generation grew up in strongly Whig and Republican households.<sup>8</sup> There they inherited a vision of an assertive federal government devoted to securing the Union.<sup>9</sup> Johnson certainly fit this description. He went on to earn his academic credentials with studies of nineteenth-century Whigs and Republicans' efforts to build internal improvements, and he made one of their central propositions—that canals helped to secure the Union and, together with other transportation improvements, facilitated the rise of a dynamic, integrated economy—the informing principle of his academic work and political activities.<sup>10</sup> In doing so, he revisited a phenomenon that scholars of Whigs and Republicans' political beliefs have largely neglected, however. Champions of individual localities often sought to turn the state's construction of a national transportation infrastructure to their own advantage, describing an interconnected Union with their own locality as its hub in order to secure local support.<sup>11</sup> Johnson made this

paradoxical strand of the Republican Party's state-building creed the intellectual keystone of his work on behalf of an expert-administered Panama Canal.

Richard John and Brian Balogh have already urged scholars to consider how preceding political arrangements laid the foundation for this period's growth of federal administrative capacity. John has argued that a nineteenth-century state regulatory regime marked by its autonomy from popular politics informed later, similar developments that gave professional experts roles in federal policymaking.<sup>12</sup> Although Johnson's work supports the basic contention that earlier political arrangements contributed to the development of an administrative state, it also reveals a very different set of contributions best explained by reference to Balogh's work. He has brought welcome attention to the role of nineteenth-century political beliefs in the larger American state-building project. He argued that an antebellum "developmental vision" recognizing and embracing the combined self-interest of individuals who stood to benefit from state action provided "an enduring ideological foundation for national governance."<sup>13</sup> Johnson became familiar with this argument for the state in his review of the American System of internal improvements that it so often supported, and his case for the Panama Canal lent the authority of economic expertise to its contention that government promotion of economic development could achieve public purposes. He described the waterway's operations as Balogh has characterized other institutional products of the developmental vision, as a variety of associative political activity. In his view, the state's construction and administration of new transportation infrastructure allowed the workings of the marketplace to secure the Union and produce social progress. Although the professor never directly identified his approach as an alternative to more conspicuous types of state activity, he pointedly acknowledged what he perceived to be Americans' suspicion of a too-strong state. Johnson's work also reveals another aspect of the developmental vision that Balogh has noted, but not discussed in detail. At the same time that it brought Americans together to support increased levels of state activity, this ideological construct stoked the geographical rivalries that drove them apart. Localities' fierce competition to turn state policy initiatives to the benefit of their own interests often found expression through electoral politics, but antebellum federal officials also manipulated their ambitions in order to secure political support for transportation initiatives.<sup>14</sup> When Johnson presented the same Panama Canal that secured the Union as benefiting local interests over those of their competitors, he revisited this technique. In the end, the professor's reports to Congress, lobbying activities, and remarks before local audiences did not themselves carry the day for administrative toll-making, and certainly not for the construction of the Panama Canal. He served as a member of a team of federal officials that did so together. His part in the successful initiative shows, however, how economic expertise proved just as helpful in the arena of democratic politics as it had in other professionals' search for autonomy and influence in the federal bureaucracy. This in turn made Johnson a more conflicted, ambiguous political actor than scholars considering experts' roles in the Progressive State have described, and at least one portion of the state itself significantly more complex, in its workings and its origins, than they have realized.

## REPUBLICAN SCHOLAR, 1864–1897

Born in 1864 in Waupun, Wisconsin, Emory Johnson grew up in a decidedly Republican household. When his father Eli Johnson died young in 1879, his neighbors remembered him as “a thorough-going Republican from the time the party was organized” who assumed responsibility for raising “men and means during the rebellion.”<sup>15</sup> As a student at the University of Wisconsin Johnson prepared a senior thesis for Frederick Jackson Turner on “The Rise and Fall of the Whig System of Improvements.”<sup>16</sup> The essay examined federal policy toward the improvement of harbors, the construction of canals, and the canalization of rivers to 1840.<sup>17</sup> Johnson returned to the subject of internal improvements in graduate study at the Johns Hopkins University, taking a master’s degree. In Herbert Baxter Adams’s seminar he extended his history of the United States’ river and harbor legislation to encompass the rise of the Republican program to 1890.<sup>18</sup> After further study overseas, Johnson enrolled at the Wharton School in 1892, receiving his PhD in the fall of 1893.<sup>19</sup> He became assistant professor of transportation there in 1896.

Johnson’s early work explicitly took up the question of the role of expertise in the American state. Advocating the construction of a coordinated national transportation system, he maintained that success relied upon what he termed “executive functions.” He sought to empower the federal government’s executive branch as experts’ natural home. Such professionals could provide the national perspective that American transportation policymaking needed so badly. Examining the federal government’s improvement of rivers and harbors, Johnson argued for “an historical study of the subject to show what Congress has done, to analyze critically what Congress is now doing and to compare our methods ... with the methods other nations employ.”<sup>20</sup> He proposed that the Secretary of War, whom he optimistically perceived as “being quite free from political pressure and relying on the counsel of the engineers,” make “a really economic and scientific application”: in short, an expert study of which projects deserved government support and which did not. Reform, he concluded, “will follow the extension of executive functions.”<sup>21</sup>

Johnson’s doctoral thesis, “Inland Waterways: Their Relation to Transportation,” reiterated his call for the state to coordinate the activities of water carriers and railroads as a national system. Noting that “The democratic spirit of Americans is chary of granting much power to the executive,” he observed that “the administrative part of our government is still undeveloped.”<sup>22</sup> Nevertheless, he advocated state control of waterways. Rivers and canals helped to keep railroad rates low by providing a competing service for the transportation of bulk commodities, he explained. If the waterways became private businesses, powerful railroads would surely purchase them, negating their competitive function.<sup>23</sup> Johnson explicitly named a prospective isthmian canal as a crucial component of a national transportation system. It would reduce transcontinental railroad rates and integrate the United States’ far-flung sections.<sup>24</sup> Ultimately, Johnson saw the waterway in evangelical, almost millennial, terms. Returning to his brief for executive action, he rued the fact that “The United States seems to stand before this project hesitating to enter upon it, much as the children of Israel stood at the entrance to the Promised Land and would not enter in. We, too, need some Joshua for a leader.”<sup>25</sup>

Johnson's appeal for a national transportation system drew on a larger argument, originally developed in the antebellum period, for the state using internal improvements to promote national economic, social, and political integration. DeWitt Clinton imagined the Erie Canal as producing a "whole republic ... bound together by the golden ties of commerce and the adamant ties of interest."<sup>26</sup> Clinton's undertaking of course predated the Whig Party but, as Daniel Walker Howe has pointed out, Whigs made internal improvements a pillar of their American System and emphasized their ability to unify a far-flung republic.<sup>27</sup> In 1846 the Philadelphian Jacob Dewees extended the argument to railroads, noting how they would unify the American people, "binding them together by a unity of interests."<sup>28</sup>

This tradition included a powerful, parochial undertow, however. When the federal government declined to build internal improvements in 1817, individual states took up the task.<sup>29</sup> Even as Clinton praised the Erie Canal for integrating the nation, he could not help but note that it had also succeeded in making New York City "the great depot and warehouse of the western world." Another New Yorker hoped that the waterway would make his city "the polar star of every valuable improvement throughout the Union."<sup>30</sup> Pennsylvania and Maryland took up state projects of their own in the years following the initiation of the Erie Canal, in hopes of gaining a larger portion of the West's growing commerce. In 1836 Philadelphians emphasized that the nearby Schuylkill Valley "belongs exclusively to Philadelphia. Within its precincts no rival can intrude. ... Whatever reaches the Schuylkill must come to Philadelphia and to Philadelphia only."<sup>31</sup> In 1852 friends of the Quaker City's western railroads deftly explained that their city would not "hesitate to provide the bands of an iron union whereby she may reserve" other cities "as profitable customers and faithful allies."<sup>32</sup> Behind the nationalist rhetoric this phenomenon, which one observer dubbed the "ugly genius of rivalry," produced an American transportation infrastructure made up of a number of individual, largely uncoordinated, concerns.<sup>33</sup> Each of the great American cities imagined itself as the "polar star" of the emerging economic order, as Johnson acknowledged in his thesis.<sup>34</sup> In at least two instances during the early antebellum period, federal officials exploited such competing sets of national ambitions in their attempt to win support for what they imagined as internal improvements that would integrate the nation's divergent sections.<sup>35</sup> Railroad promoters did the same thing during the decades surrounding the Civil War, a practice that Johnson later recognized in a 1908 publication.<sup>36</sup> In the Gilded Age, the Republican Party again cited internal improvements as aids to national integration.<sup>37</sup> Johnson's academic mentor Simon Patten, a stalwart Republican himself, agreed.<sup>38</sup> He praised the party for using improvements to secure "a real nationalism ... not provincialism" in America.<sup>39</sup> Further state development of transportation networks especially stood to benefit the South, where industrial development needed "particular encouragement. The key to national prosperity lies in Southern prosperity."<sup>40</sup> Patten ignored the geographical rivalries at the heart of his Republican view of internal improvements, but circumstances would place Emory Johnson in a position to revisit them.

## THE UNITED STATES INDUSTRIAL COMMISSION, 1898–99

In 1898 Johnson and other professional economists took the national stage with the formation of the United States Industrial Commission. Pennsylvania Congressman Thomas Wharton Phillips led the charge for an investigative panel similar to the British Royal Commissions on Labour, and in 1898 President McKinley signed legislation creating the new body. Congress chose five men from the Senate and five from the House, a total of six Republicans and four Democrats, to serve on the Commission, while McKinley chose nine members of the public, including a former Republican governor and Phillips, recently retired from Congress.<sup>41</sup> Turning to their charge, the commissioners had no idea how to proceed. The legislation creating the Industrial Commission had called for the preparation of reports discussing specific industrial sectors and industries. Continuing the federal government's traditional means of gathering information, the Commission initially relied upon the process of hearing oral testimony from interested parties. This practice uncovered several problems, however. In the case of trusts, the Commission's *Preliminary Report* noted

the witnesses summoned were either persons connected with the combinations—hence those inclined to see their favorable side—or their rivals, who were naturally led to see and speak of their evil aspects. An inevitable result has been that the evidence, even on questions of fact, as often been contradictory, and in some instances it has been impossible from the testimony so taken to reach any positive conclusion.<sup>42</sup>

E. Dana Durand, a commissioner who served as the body's Director of Research, noted that when a witness came before the body, "the difficulty is only begun. ... A high degree of expert knowledge regarding the matters on which the witness is expected to testify becomes essential."<sup>43</sup> In this context the Industrial Commission began to call on professional social scientists to help prepare the commissioners for public testimony, and to provide additional testimony as well. Phillips invited Johnson to appear before the Commission, and he did so on March 3, 1899.<sup>44</sup> The commissioners' questions largely emphasized railroad issues, and Johnson informed the hearing that he regarded the railroads as a public service.<sup>45</sup> Durand further encouraged the Industrial Commission to "map out its field thoroughly, and select experts to work it for facts systematically and comprehensively."<sup>46</sup> The body soon invited "university men and trained investigators" to investigate specific topics.<sup>47</sup> A few weeks after his testimony Johnson received and accepted a request to prepare the Industrial Commission's report on transportation.<sup>48</sup>

## THE ISTHMIAN CANAL COMMISSION, 1899–1901

Emory Johnson left his position as expert to the United States Industrial Commission to begin work as a member of the Isthmian Canal Commission in late 1899.<sup>49</sup> Again, he owed his appointment to Pennsylvania Republicans. Although scholars exploring professional social scientists' integration into the Progressive State have emphasized their original institutional homes in national professional associations and nationally oriented universities, the University of Pennsylvania maneuvered to secure its interests in a local context as well.<sup>50</sup> Its leaders actively cultivated ties with local and state officials in this period, due in part to their institution's persistent need for additional financial support.<sup>51</sup> In 1894 they hired Charles Harrison, a wealthy sugar manufacturer who had recently sold his Philadelphia operations to the New York-based

American Sugar Refining Company, as provost. In addition to providing a series of generous donations, Harrison cemented the university's ties to the Republican Party. He served as treasurer of the party's committee for Pennsylvania and went on to raise campaign funds of some \$400,000 for McKinley's reelection in 1900.<sup>52</sup> Harrison encouraged President McKinley to appoint Johnson to the body.<sup>53</sup>

The young professor immediately began to prepare a report detailing the canal's economic impact on the United States and the world, but his work meant little to the body's principal activities. The McKinley administration had already decided to move toward a canal's construction and turned the Commission toward the delicate matter of securing a suitable path across the isthmus. It surveyed the Panamanian and Nicaraguan routes, but in fact focused its efforts on acquiring rights to the French-owned New Panama Canal Company's abandoned excavation. Johnson did not join the commissioners who in August of 1899 traveled to Paris for the purpose of examining the New Panama Canal Company's charts and documents and, presumably, attempting to negotiate a price for their Panama concession.<sup>54</sup> He remained in the United States, patiently gathering data for his portion of the Commission's report.<sup>55</sup>

Between April 1900 and November 1901 the Commission failed to bring the French below a price of \$109,141,500 for the existing works. In their report the commissioners mentioned the exorbitant French demands, valued the property at \$40,000,000, and recommended that any American project follow the Nicaraguan route explored by a preceding commission.<sup>56</sup> The result, as Johnson recalled, "was what was expected by the Commission."<sup>57</sup> In light of the Americans' apparent willingness to move forward in Nicaragua the French company capitulated and promptly voted to sell the property to the Americans for \$40,000,000. President Theodore Roosevelt asked the Commission to reconvene in light of this new evidence. The body quickly published a supplemental report recommending the purchase of the French properties in Panama and the construction of a canal there.<sup>58</sup> On June 19, 1902, after a prolonged series of Senate hearings, Congress authorized the president to proceed with a canal via the Panama route.<sup>59</sup> Despite his apparent lack of participation in the Commission's real work, Johnson gave the assigned task his full attention. The university provided him with a leave of absence that ultimately covered the 1899–1900 and 1900–1901 academic years. He removed to Washington, DC, where the Commission provided him with an office and an assistant. Johnson principally focused his efforts on making an estimate of the canal's potential benefits to American industry and commerce. In addition to consulting materials provided by the United States Bureau of Statistics, American consuls in foreign ports, and a traffic study produced by the New Panama Canal Company, the professor gathered data about potential canal usage by correspondence and in-person visits with commercial organizations and other groups of businessmen in American port and industrial cities. In the spring and fall of 1900 Johnson, his assistant, and fellow commissioner Samuel Pasco visited seaports between Portland, Maine; and Galveston, Texas, as well as manufacturing centers of the Middle West, asking businessmen for information.<sup>60</sup>

Journalists in many of the cities where the party called reported an aspect of their visit that the economist left out of his report and memoirs. Although they routinely described Johnson as a professor at a prominent eastern university and representative of the federal government,



reporters also recorded the fact that he presented himself to local businessmen as a canal advocate openly seeking information that would help him to produce a report showing a waterway's great value to their community. On a visit to Chattanooga, Tennessee, a local publication announced Johnson's labors as preparatory to a report "in which he will urge the necessity of building and completing the canal." It called local manufacturers who shipped goods to the Pacific to contact a Captain Goulding, who desired several "good strong letters" from local manufacturers who made the heaviest shipments to that quarter, demonstrating the advantage they would reap if transcontinental freight rates were cheaper, and noted that Johnson was securing data in a similar manner from other large cities of the United States.<sup>61</sup> In Savannah, Georgia, an observer again noted that Professor Johnson sought to obtain information that could be used in support of the argument in favor of a canal. After Johnson's address there, the city's men of affairs appointed a committee of nine charged with gathering and arranging statistics to show the value of an isthmian waterway.<sup>62</sup>

Johnson sharpened appeals to specific geographical interests and rivalries in his remarks. In Atlanta, the *Constitution's* account of his visit noted that southerners expected to reap a project's greatest benefits since the canal linking the two great oceans would be located nearest to the nation's gulf ports.<sup>63</sup> On a visit to Pittsburgh, Johnson collected a large set of statistics gathered by the city's chamber of commerce, reflecting the annual tonnage that left the city for Far Eastern ports, and the time that could be saved in its transportation through an isthmian canal.<sup>64</sup> In his remarks to local businessmen and dignitaries, he maintained that a canal could improve their competitive position relative to other manufacturing cities. It would assist them with "the problem of transporting (their) products to the marts of the entire world at a cost comparable with cities favored by deep-water harbors."<sup>65</sup>

As the Commission's work wrapped up, it became apparent that Johnson also served as the body's resident publicist and promoter. He penned a number of articles for popular publications, as well as academic journals, summarizing its work and explaining its recommendations.<sup>66</sup> He also continued to travel around the nation, emphasizing a canal's virtues. The professor's remarks drew the conflict within his canal advocacy in sharp relief. In early 1901 Johnson spoke at the American Academy of Political and Social Science in his home city of Philadelphia. Before a scholarly audience, he emphasized that a canal "will tend to unify the political and social interests of this wide country and tend to make the American people, dwelling thousands of miles apart, one in thought and one in action."<sup>67</sup> In the following year, his remarks in the Midwest again emphasized how the waterway would benefit individual communities, however. In Cleveland, Johnson insisted that his statistical evidence "shows that the interoceanic waterway will accelerate and appreciably strengthen the position of Cleveland as a center of production." Two days later in Indianapolis he took a similar tack, maintaining that although the city "was removed from the seaboard, the isthmian canal would be of incalculable benefit" to its economic fortunes."<sup>68</sup>

Nearly a year before its unusual negotiation with the French New Panama Canal Company, the Isthmian Canal Commission submitted a preliminary report to President McKinley.<sup>69</sup> In his portion of it, Johnson emphasized that a waterway would provide Americans with significant

economic benefits, both commercial and industrial, and “strengthen the unity of the national and political interests of the United States.”<sup>70</sup> Aldace F. Walker, chairman of the Atchison, Topeka and Santa Fe Railway, sharply criticized Johnson’s work. Fearful of an isthmian waterway’s impact on transcontinental rates, he argued that the study of a canal’s economic benefits was “apparently organized...for the purpose of finding something for Prof. Johnson to do which might be related to his own sphere of work.” Pegging Johnson’s work as “the first authoritative statement of the claims of canal advocates,” Walker suggested that the expert had collected and assembled his economic data, especially that pertaining to traffic likely to use a waterway in the future, with an intention to present a canal in the best possible light. Even the most optimistic promoter of a new railroad scheme in competitive territory would hardly venture to add together all possible traffic by existing land and water routes, and submit the total as his expectation of business, he complained. Walker hoped to show that the canal would become a burden to the taxpayers and gleefully pointed out a flaw in Johnson’s reasoning. The professor had inflated the canal’s economic potential by estimating the tonnage that might have used the canal had passage been free to all, while in fact advocating a \$1 per ton toll. “The method which has been adopted, so far as this matter has gone, has been the reverse of scientific,” Walker concluded. Johnson’s calculations revealed “a species of self-deception that suggests the attitude of an advocate rather than that of a judge.”<sup>71</sup>

Johnson’s contribution to the Commission’s full report, published in 1902, organized data in order to illustrate a prospective canal’s positive economic effects on the United States’ major geographical regions, including the South, the Northeast, the Central West, and the Pacific Coast states. It also included quotations from businessmen, which he intended “to be illustrative rather than comprehensive,” discussing a potential waterway’s benefits to their firms and communities.<sup>72</sup> Many located in the interior South maintained that a canal would enable them to reach Asian markets by way of ports located on the Gulf of Mexico, rather than the Atlantic or Pacific, at a considerable savings in railroad freight cost.<sup>73</sup> Johnson’s report did not contain remarks from representatives of railroads linking these cities to Atlantic and Pacific ports nor merchants in those ports, who each stood to lose a lucrative traffic, but he allowed that upon the completion of a canal they would see a general decline in the southern trade.<sup>74</sup> Nevertheless, he directly disputed the idea that a canal’s promotion of economic activity in one region or city necessarily reflected another’s loss.<sup>75</sup> He maintained that a canal would provide southerners hoping to harvest the region’s abundant natural resources and establish new manufacturing enterprises with an opportunity to bring about economic activity “not now in existence,” eventually yielding coastal ports a larger volume of trade overall due to the canal’s general tendency to increase economic activity.<sup>76</sup>

Johnson addressed the transcontinental railroads’ fear of competition in similar terms. The economist believed in what he called “socialization of rates,” by which he meant “fixing the charges ... with reference primarily to the needs of society, and only secondarily to the cost or value of each particular service.” Johnson did not support a direct socialization of rates by government fiat. Rather, he knew that an isthmian canal would allow many shippers to reach the West Coast and beyond at considerably lower cost than that paid to the railroads.<sup>77</sup> In his contribution to the Commission’s report, Johnson admitted that the canal’s competition would

affect the transcontinental railroads' "through business" and local traffic. While it would reduce their rates for transcontinental freight, the canal's general tendency to promote American prosperity would, again, more than offset the roads' loss by the expansion of local traffic, which he contended was "always more profitable than the through traffic." He concluded that the increase in the population of the country and the growth in home and foreign trade would soon demonstrate the need for the transportation service provided by both the canal and the railways.<sup>78</sup>

Aldace Walker had correctly identified Johnson's loyalties and recognized the economist as a new kind of political opponent. Although his report contained a wealth of statistical information, the professor parried the railroader's contentions by assertion. His portion of the Commission's report emphasized how a canal would provide national political and economic integration and specifically argued against the idea that it would enhance individual cities' competitive positions relative to others', the position he had taken in his remarks to local audiences. Nevertheless, the authority of expertise proved difficult to defeat. Despite Walker's attack Johnson still commanded a professional's respect in many quarters and seemingly rose above the fray of political and economic interests. Remarking on the professor's contribution to the Commission's preliminary report, the *New York Commercial* noted how his "expert opinion" that the canal would not harm the railroads "ought to go a great deal farther with the protesting railway interests than the scattered lay opinions of canal enthusiasts."<sup>79</sup> Although he lacked any role in the Isthmian Canal Commission's real political task, future developments would show that Johnson's report had established the Wharton scholar as the nation's leading expert on an isthmian canal's economic aspects, and this reputation would pay off in the coming years.

#### PANAMA CANAL TRAFFIC AND TOLLS, 1911–1914

The issue of an isthmian canal's administration, including the matter of tolls, did not come to a head until the waterway neared completion. Panama Canal Chief Engineer George W. Goethals had turned a struggling project into successful excavation and construction activity. He had also developed a vision of its operation emphasizing one-man control of the new administrative apparatus.<sup>80</sup> In the matter of tolls he favored an approach emphasizing the waterway's financial self-sufficiency, but his staff proved unable to develop a prospective tolls schedule based on those in effect at other canals.<sup>81</sup> In 1911 American businessmen wrote Goethals to urge a speedy resolution of the tolls question. Shipping lines and industrial corporations operating their own fleets needed information quickly so as to allow them to acquire ships most favorably suited to the Panama rules.<sup>82</sup>

Goethals soon heard from Johnson. The professor wrote that "there are urgent reasons why Congress should legislate as soon as practicable upon the question of tolls." Johnson argued persuasively for the Congress making toll-setting an executive function. He believed the legislative body's parochial interests could only destroy the canal's usefulness.<sup>83</sup> The information required by President Taft for toll-setting "will need to be secured ... from carriers and shippers and by a concrete study of actual business methods and conditions." Goethals knew Johnson as

the author of the Isthmian Canal Commission report's discussion of a canal's likely economic impact, and quickly invited him to Panama for a lengthy consultation.<sup>84</sup>

Johnson spent late July and August of 1911 in Panama. He and Goethals agreed that the waterway should produce revenues sufficient to support its operation and slowly recoup the government's investment in its construction, though not so high as to divert any potential traffic and undermine its economic usefulness. They also concurred in their belief that the president should enjoy the authority to fix and adjust the charges, which should be equal for American and foreign-flag ships.<sup>85</sup> At the end of Johnson's visit, Goethals cabled Secretary of War Henry Stimson, requesting the professor's appointment to investigate and report on Panama Canal tolls and vessel measurement rules. Stimson quickly complied, naming him Special Commissioner for Panama Canal Traffic and Tolls.<sup>86</sup>

Johnson and Goethals used the professor's appointment and subsequent report as political implements to promote their vision of the canal's administration. Upon becoming Special Commissioner, Johnson had received instructions not only to prepare a report for the president, but to make himself available to members of Congress in order to provide any information that they might find helpful in preparing a canal bill.<sup>87</sup> When Senator W. C. Adamson of the House Committee on Interstate and Foreign Commerce wrote to ask Stimson if he had an expert that he wished to testify before the committee, the secretary named Johnson.<sup>88</sup> In 1912 the professor appeared before House and Senate committees arguing against legislative toll-setting, for "the establishment and adjustment of tolls is an administrative problem. Congress must trust the Executive with executive problems."<sup>89</sup> Apparently Johnson's testimony made some headway in the fight to gain toll-making powers for the executive, as the *New York Journal of Commerce* noted that members of the House Committee on Interstate Commerce "are now seriously deliberating as to whether it would not be a good policy to delegate this duty to the Administration. They were greatly impressed with the testimony of Professor E.R. Johnson."<sup>90</sup> In April Johnson sent Goethals proofs of his report chapters for review. He also mentioned that he had used his position's access to Congress to engage in lobbying specific members of that body, noting that he had "kept in touch with Senator Brandegee," chairman of the Senate Interoceanic Canals Committee, "and will give him such assistance as I can." Johnson later reported that Brandegee had distributed a pamphlet reprinting Chapter Six of his forthcoming report, "the chapter on The Relation of the Panama Canal to the Traffic and Rates of American Railroads," to members of the Senate.<sup>91</sup> On June 17, 1912, Johnson provided Goethals with more information about his efforts. He had failed to track down three Congressional leaders, he reported, and concluded that "It will be best for me to stick ... closely to work on the report on 'Traffic and Tolls' for the next two weeks. As soon as Congress resumes its legislative work, I will make a point of having a talk with members of the Senate Committee and of the House 'Conferees' regarding several features of the canal bill."<sup>92</sup>

Before Congress ruled as to the matter of who would set the tolls, Johnson had begun preparing a document that would, he and Goethals hoped, provide President Taft with a schedule of fees due from ships using the waterway. On August 7, 1912, the professor presented *Panama Canal Traffic and Tolls* to Stimson, who promptly forwarded it to the president.<sup>93</sup> It set out five basic

goals for the canal's toll policy. First, Johnson argued, tolls should facilitate the canal's use. Second, the canal should become no burden on the American taxpayers. Third, those who utilized the canal should pay for its operation. Fourth, the Hay-Pauncefote treaty of 1901 bound the United States to provide canal navigation without discrimination. Finally, the tolls should be such as to attract whatever shipping had equal resource to the Panama and Suez Canals. With these considerations in mind, Johnson recommended a toll of \$1.20 per net ton for vessels carrying passengers or cargo; \$.72 for vessels without passengers or cargo; and \$1.20 for army and navy transports, colliers, hospital ships, and supply ships.<sup>94</sup>

Congress voted to establish toll-making as an executive function in the Panama Canal Act, which President Taft signed on August 24, 1912.<sup>95</sup> Thus empowered, the president enacted the Special Commissioner's recommended rates in a November 13 proclamation.<sup>96</sup> The Panama Canal Act also expressly exempted American steamship operators carrying cargo between domestic ports from the payment of such fees, however. Johnson had testified that the campaign for such a coastwise toll exemption in part played upon popular bitterness toward railroads. An exemption would drive down railway rates, the measure's supporters disingenuously argued, by allowing steamships to offer lower coastwise charges. As a professional economist, Johnson realized that such a measure would not produce a socialization of rates. Transportation charges reflected market conditions, and not providers' costs. Steamship companies would not react to lower tolls by reducing their rates. They would keep the savings as additional profit.<sup>97</sup>

Johnson's efforts changed Stimson's position on the matter of a coastwise tolls exemption. In the fall of 1911 the secretary had delivered an address to a group of Kansas City businessmen in which he discussed "Problems Related to the Panama Canal."<sup>98</sup> He maintained that the canal's administration, like its construction, was "essentially an executive problem," demanding the attention of a flexible authority informed by expertise.<sup>99</sup> At that time he also asserted the United States' right to pay tolls for American-flagged shipping, or simply relieve them of the burden of tolls altogether. Referring to the ongoing discussion of potential tolls paid by the American coastwise traffic, he recommended that the federal government do so, especially in light of the fact that English and German lines received government subsidies. He also argued that a coastwise tolls exemption would produce sea-borne competition with the transcontinental railroads, leading to a reduction in their cross-country freight charges.<sup>100</sup>

Johnson later recalled how he had discussed the matter with the secretary shortly after the latter's Kansas City remarks, and convinced him "that all vessels should pay tolls."<sup>101</sup> By the summer of 1912 Stimson had begun informing correspondents calling for a tolls exemption that, while he continued to assert the United States' legal right to reimburse or waive tolls for American shipping, he now did "not believe as a matter of national expediency that it should do so." To relieve coastwise ships of tolls "would be simply paying money to a special interest which does not need any such protection."<sup>102</sup> In the spring of 1912 the secretary attacked the idea of a coastwise tolls exemption in testimony before both houses of Congress, with Johnson on hand to provide technical information and clarifications as needed in both instances.<sup>103</sup> He also cited Johnson's study in a letter to the president urging him to oppose a coastwise exemption.<sup>104</sup>

Johnson and Stimson's efforts did no good, however. President Taft refused to act against the exemption.

Upon the expiration of his appointment as Special Commissioner, Johnson continued to sing the praises of the Panama Canal in familiar terms. He argued that the waterway's most important effect would be "the influence it exerts in the unification of the United States." America's geographic diversity had led to inevitable friction, such that "the clash of the sections has nearly caused political disruption." The railroad, the telegraph, and the telephone made political unity certain, he continued, but every agency that brought the different parts of the country into closer interdependence facilitated harmonious political and social development. The Panama Canal would increase the economic solidarity of the United States and promote the rise of a unified nation: "the canal will help to make us one people."<sup>105</sup>

He also continued to argue against the coastwise tolls exemption. At the American Society of International Law's debate on the tolls issue he made an argument citing calculations that clearly showed how the canal required revenue from coastwise traffic in order to meet its expenses.<sup>106</sup> In other settings he repeated his appeals to local interests, however. Before the Traffic Club of Pittsburgh, Johnson informed businessmen that the exemption would not yield lower rates, only higher profits for carriers. At Birmingham the professor supplemented his analysis with an appeal that again cast the Pittsburgh businessmen whom he had just encouraged as geographical rivals likely to benefit from the exemption. In an address to the city's chamber of commerce he extolled the canal's benefits for the South. If in the past it had been easier to reach the export markets from Pittsburgh and other northern iron and coal districts than from Birmingham, he argued that the canal would enable southern iron and steel producers to ship their products "under more favorable advantages than can their competitors north of the Ohio and Potomac."<sup>107</sup>

On June 11, 1914, Congress repealed the coastwise tolls exemption provision of the Panama Canal Act. The legislation secured the construction of a new part of the period's administrative state. It completed the executive branch's assumption of Panama Canal toll-making authority and made Johnson's tolls schedule, for all ships, the policy in effect at the isthmus. Although Johnson could not claim any substantive contribution to a political victory earned by a Democratic president using a wide array of the political levers at his disposal to bring his party in line, the professor's determined opposition to the exemption represented a further articulation of the specific variety of political expertise that he had developed in the Progressive State.<sup>108</sup>

Johnson's recommendations bore the imprimatur of scientific expertise, but they had not emerged from a detailed, scientific study of canal tolls alone. Rather, Goethals and Johnson had discussed the tolls issue before Johnson began his study, and Goethals had reviewed the professor's draft report. Taking advantage of his appointed position and using his professional skills and reputation as political tools, Johnson had engaged, informed, and lobbied members of Congress and Secretary Stimson on behalf of his and Goethals's vision of canal administration. He had also gone to great lengths to engage the public in local appearances. In them he echoed the argument he had made on behalf of the waterway's construction as a member of the Isthmian Canal Commission, appealing to individual cities' material interests on behalf of a national, administrative state.

## CONCLUSION

Although the vast majority of work considering experts' emergence in the federal government during this period has focused on individuals securing long-term positions, two scholars have suggested that many served in temporary capacities. Daniel Rodgers reminded his readers that this phenomenon shows how thin and uncertain the line between state and society remained, while Theda Skocpol identified short-term service as an obstacle to rational organization and institutional autonomy, producing a decentralized and fragmented state.<sup>109</sup> Emory Johnson's work reveals another consequence of a provisional appointment. Apparently unaffected by civil service regulations, it represented an opportunity for Republican Party officials seeking to influence, or at least establish some presence in, the new realm of state expertise. Although Johnson, like so many of his peers, criticized Americans' locally oriented, partisan politics, he received his first two state appointments at least in part by dint of his university's relationship with Philadelphia Republicans, and he subsequently demonstrated his enduring ties to locality and party when he became a director of the Philadelphia Maritime Exchange in 1907 and joined that Republican redoubt, the Philadelphia Union League Club, in 1912.<sup>110</sup>

The economist demonstrated his partisan identity most clearly with the political ideas that informed his work, however. Operating outside the closely organized executive bureaucracies, he found an opportunity to articulate them, grounding his calls for national integration and executive authority in an intellectual tradition including Whig and Republican beliefs. Although most members of the Union League would only have nodded their heads at an after-dinner speaker's familiar contention that canals and railroads produced prosperity and political union, Johnson had grown up in, and then had become a scholar of the nineteenth-century political initiative that gave rise to it. He went on to adopt it as a central theme of his work as an economist and his persuasive efforts as an expert.

Johnson's activities brought his nineteenth-century political imagination together with the political capital in his expertise, which in turn resided in the same skills and reputation that other professionals serving the executive branch employed. Like them, he sought to construct a piece of a new administrative state. But he did so in a very different way. Many of them won long-term appointments and insulation from Democratic politics by cultivating specialized skills and a reputation for objectivity while also making alliances with new interest groups. As a temporary appointee continuing to value and improve his university position (he became dean of the Wharton School in 1919), Johnson paid little attention to his standing and future prospects within the state.<sup>111</sup> He focused on a situation in which he could only help the McKinley and Taft administrations to achieve their shared policy objectives by plunging into the politics that scholars have told us other experts sought to avoid, persuading a Congress organized as a set of geo-geographically defined entities to grant them. Johnson also believed that he needed to influence Congress at a grassroots level by appeals to a public audience. The economist first used his skills and reputation to produce reports and testimony communicating his and his allies' preferred policies to Congress and, ultimately, lobby its members. He made the same appeals to the general public in popular periodicals. In these roles he success-fully clothed his belief in canals securing the Union, and then administrative toll-making, with the authority of social science. He also used his expertise to reject opposing interests' objections to the policies he advocated in official documents. At the same time, he relied on a contradiction within his nineteenth-century

political ideology and rhetorical stance. His reports contained appeals to local interests that a canal and its correct administration would supposedly supersede, as did his remarks to audiences in individual cities. The professor never became an advocate for Philadelphia's own commercial concerns during his service to the state. Nevertheless, when he told legislators and local groups how the canal, or its proper administration, would promote their material interests over those of other cities, he used his Whig-Republican political ideas to acknowledge and take advantage of locally oriented democratic politics' persistent pull in the twentieth-century United States.

Historians and political scientists examining expert professionals' state-building activities in this period have often concluded that their emergence marked and symbolized a watershed in which an often-undemocratic new politics of administration and interest groups displaced the nineteenth century's partisan, locally oriented public life. Although Emory Johnson's statements and activities in a number of ways seem to support this contention, a fuller examination of his work shows that his expertise often produced quite a different effect. Scholars have already pointed out several significant connections between nineteenth-century American state-building activities and those of the following century. A number of relatively self-directed nineteenth-century state actors laid a foundation for Progressive state-builders to fashion increasingly autonomous bureaucracies. A developmental vision informed associative institutional arrangements that furnished a model for later federal activity in segments of the state more affected by Americans' persistent wariness of central authority. Johnson's work adds to this list of links. His ideas and activities pertaining to the Panama Canal illustrate a complex set of ties between the partisan, popular politics of his youth and what scholars have described as the administrative politics of the succeeding period. Ultimately, Johnson's activities reveal the expert as a multidimensional historical figure, rather than an architect and symbol of bureaucratic modernity, and the Progressive Era's administrative state as, in at least one instance, similarly multifaceted and conflicted in its origins. Although the economist was only one man who served in a very specific capacity, the fact that major works of scholarship have noted that the federal government often relied on temporary experts in this period, and that many of his peers also found their roots in the Republican Party's intellectual tradition, suggests that further examination of expertise in the Progressive State will uncover other connections, perhaps similarly paradoxical, between the nineteenth and twentieth centuries' institutional politics.

#### NOTES

<sup>1</sup> S. N. D. North, "The Industrial Commission," *North American Review* (June 1899): 710.

<sup>2</sup> In this article I use the term Progressive State to refer to the federal government during the period 1897–1917. For an example of work presenting experts as critics of partisan politics, see Stephen Skowronek, *Building a New American State: The Expansion of National Administrative Capacities, 1877–1920* (New York: Cambridge University Press, 1983), 55.

<sup>3</sup> For examples of the latter argument, see Nancy Cohen, *The Reconstruction of American Liberalism, 1865–1914* (Chapel Hill: University of North Carolina Press, 2002), 254, 224; and William J. Novak, "The Legal Origins of the Modern American State" in *Looking Back at Law's Century*, eds. Austin Sarat, Bryant Garth, and Robert A. Kagan (Ithaca, NY: Cornell University Press, 2002), 273. Also see Thomas C. Leonard, "Progressive Era Origins of the Regulatory State and the Economist as Expert," *History of Political Economy* (Suppl. 1 2015): 47, 49–76; "American Progressivism and the Rise of the Economist as Expert" (July 2006): 1. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.926635>; and "'The Wise Minority in the Saddle:' When American Economics became



an Expert Discipline,” *History of Economics Society Meetings*, 2012. Available at [www.princeton.edu/~tleonard/papers/wiseminority.pdf](http://www.princeton.edu/~tleonard/papers/wiseminority.pdf). A number of scholars have described two political cultures in this period, one comprised of grassroots organizations (often built by disfranchised women), and another consisting of the Progressive State’s increasing reliance on technical experts and divorce from democratic politics. See Kathryn Kish Sklar, “Two Political Cultures in the Progressive Era: The National Consumers’ League and the American Association for Labor Legislation” in *U.S. History as Women’s History: New Feminist Essays*, eds. Linda Kerber, Alice Kessler-Harris, and Kathryn Kish Sklar (Chapel Hill: University of North Carolina Press, 1995), 36–62; Paula Baker, “The Domestication of Politics: Women and American Political Society, 1780–1920,” *American Historical Review* 89 (June 1984): 620–47; Maureen Flanagan “Gender and Urban Political Reform: The City Club and the Woman’s City Club of Chicago in the Progressive Era,” *American Historical Review* 95 (Oct. 1990): 1032–50; Sara Evans, “Women’s History and Political Theory: Toward a Feminist Approach to Public Life” and William Chafe, “Women’s History and Political History,” both in *Visible Women: New Essays on American Activism*, eds. Nancy Hewitt and Suzanne Lebsock (Urbana, University of Illinois Press, 1993), 119–40 and 101–18, respectively.

<sup>4</sup> Daniel Carpenter, *The Forging of Bureaucratic Autonomy* (Princeton, NJ: Princeton University Press, 2001), 1, 33.

<sup>5</sup> See Carol Nackenoff and Julie Novkov, “Statebuilding in the Progressive Era: A Continuing Dilemma in American Political Development” in *Statebuilding from the Margins: Between Reconstruction and the New Deal*, eds. Carol Nackenoff and Julie Novkov (Philadelphia: University of Pennsylvania Press, 2014), 10.

<sup>6</sup> Johnson’s entry in *The National Cyclopaedia of American Biography* (New York: J. T. White v. 36 [1961] 459) explicitly notes, “In politics he was a Republican.”

<sup>7</sup> For a similar critique, see Pamela Brandwein “Law and American Political Development,” *Annual Review of Law and Social Science* 7 (2011): 188–212. Nackenoff and Novkov also acknowledge the significance of political ideologies and beliefs in their recent reappraisal of the literature of American state-building in this period. See their “Statebuilding in the Progressive Era.”

<sup>8</sup> Dorothy Ross, *Origins of American Social Science* (New York: Cambridge University Press, 1990), 101–3; and “Socialism and American Liberalism,” *Perspectives in American History* 11 (1977–78): 15–22, 69–70; Mary O. Furner, *Advocacy and Objectivity: A Crisis in the Professionalization of American Social Science, 1865–1905* (Lexington: University Press of Kentucky, 1975), 48–55. Eldon Eisenach, *The Lost Promise of Progressivism* (Lawrence: University of Kansas Press), 49–50; and “Progressivism as a National Narrative in Biblical-Hegelian Time,” *Social Philosophy and Policy* 24:1 (2007): 59; on the Whig intellectual tradition in antebellum politics, see Daniel Walker Howe, *The Political Culture of the American Whigs* (Chicago: University of Chicago Press, 1979).

<sup>9</sup> Eisenach, *Lost Promise of Progressivism*, 68, 73.

<sup>10</sup> John Gerring, *Party Ideologies in America, 1828–1996* (New York: Cambridge University Press, 1998) 15.

<sup>11</sup> Robb Haberman, “Provincial Nationalism: Civic Rivalry in Postrevolutionary American Magazines,” *Early American Studies* 10 (Winter 2012): 165.

<sup>12</sup> Richard John, “Ruling Passions: Political Economy in Nineteenth-Century America” in *Ruling Passions: Political Economy in Nineteenth-Century America* (University Park: Penn State University Press, 2006), 1–20.

<sup>13</sup> Brian Balogh, *A Government Out of Sight: The Mystery of National Authority in Nineteenth-Century America* (New York: Cambridge University Press, 2009), 20.

<sup>14</sup> Balogh *A Government Out of Sight*, 142–43.

<sup>15</sup> Emory Johnson, *Life of a University Professor* (Philadelphia: Ruttle, Shaw and Wetherill, 1943), 2, 3.

<sup>16</sup> Reuben G. Thwaites, *The University of Wisconsin: Its History and Its Alumni* (Madison: J. N. Purcell, 1900), 502; Johnson, *Life of a University Professor*, 13. According to the staff at the University of Wisconsin Archives, no copy of Johnson’s thesis survives.

<sup>17</sup> Johnson, *Life of a University Professor*, 13.

- 18 Johnson published a version of his paper as "River and Harbor Bills," *Annals of the American Academy of Political and Social Science* 2:2 (1891–1892): 50–80. See *Life of a University Professor*, 17.
- 19 Johnson published his doctoral dissertation as a supplement to the *Annals of the American Academy of Political and Social Science* in 1893. "Inland Waterways: Their Relation to Transportation," Supplement to the *Annals of the American Academy of Political and Social Science* (Sept. 1893).
- 20 Emory Johnson, "River and Harbor Bills," *Annals of the American Academy of Political and Social Science* 6 (1891–2): 782.
- 21 Johnson, "River and Harbor Bills," 809.
- 22 Johnson, "Inland Waterways, Their Relation to Transportation," 119.
- 23 Johnson, "Inland Waterways," passim.
- 24 Johnson, "Inland Waterways," 133.
- 25 "Inland Waterways," 15.
- 26 Steven Siry, *DeWitt Clinton and the American Political Economy: Sectionalism, Politics, and Republican Ideology, 1787–1828* (New York: Peter Lang, 1990), 8.
- 27 Howe, *The Political Culture of the American Whigs*, 138.
- 28 Jacob Dewees, *Railroads for Philadelphia!* (Philadelphia: H. Orr, 1846), 23.
- 29 For a discussion of this tendency, see Carter Goodrich, *Government Promotion of American Canals and Railroads, 1800–1890* (Westport, CT: Greenwood Press, 1960), 294–95; Richard L. McCormick, "The Party Period and Public Policy: An Exploratory Hypothesis," *Journal of American History* 66 (Sept. 1979): 293."
- 30 DeWitt Clinton, "Memorial to the Citizens of New York, in Favour of a Canal Navigation between the Great Western Lakes and the Tide-Waters of the Hudson" in *Memoir of DeWitt Clinton*, ed. David Hosack (New York: J. Seymour, 1829), 410; A Serious Appeal to...the Legislature of the State of New York (n.p., 1816) cited from Ronald E. Shaw, *Erie Water West: A History of the Erie Canal, 1792–1854* (Lexington: University Press of Kentucky, 1966), 66.
- 31 *Proceedings of the Citizens of Philadelphia Relative to the Rail Road to Erie, and of the Convention at Williamsport, Lycoming County, PA* (Philadelphia: J. Thompson, 1836), 18.
- 32 Jesse Godley, Robert V. Massey, and Peter Sieger, *Address of the Committee Appointed at a Mass Meeting Held by the Friends of the Philadelphia, Easton, and Water Gap Rail-Road* (Philadelphia: Brown's Steam Power Book and Job Printing Office, 1852), 6.
- 33 *United States Gazette*, Feb. 11, 1825; cf. Louis Hartz, *Economic Policy and Democratic Thought: Pennsylvania, 1776–1860* (Cambridge, MA: Harvard University Press, 1948), 12.
- 34 Johnson, "Inland Waterways," 5. He did not repeat his political predecessors' exact, celestial reference, however.
- 35 Balogh, *A Government Out of Sight*, 142–43; for a more detailed account, see William Sellers *The Market Revolution: Jacksonian America, 1815–1846* (New York: Oxford University Press, 1991), 152; for another episode, see Colleen Dunlavy *Politics and Industrialization: Early Railroads in the United States and Prussia* (Princeton, NJ: Princeton University Press, 1994), 129.
- 36 Frederick A. Cleveland and Fred W. Powell *Railroad Promotion and Capitalization in the United States* (New York: Longmans, Green and Co., 1909), ch. 7; Don Harrison Doyle *The Social Order of a Frontier Community: Jacksonville, Illinois 1825–1870* (Urbana: University of Illinois Press, 1978), 83; John Lauritz Larson *Bonds of Enterprise: John Murray Forbes and Western Development in America's Railway Age* (expanded edition) (Iowa City: University of Iowa Press, 2001), 49. See Emory Johnson *American Railway Transportation* (New York: D. Appleton and Col, 1908), 320.

- <sup>37</sup> Charles W. Calhoun, "Political Economy in the Gilded Age: The Republican Party's Industrial Policy," *Journal of Policy History* 8:3 (1996): 292–93; John Gerring, "Party Ideology in America: The National Republican Chapter, 1828–1924," *Studies in American Political Development* 11 (Spring 1997): 59; Charles W. Calhoun, *Minority Victory: Gilded Age Politics and the Front Porch Campaign of 1888* (Lawrence: University Press of Kansas, 2008), 18.
- <sup>38</sup> Roswell McCrea "Biographical Sketch of Simon Nelson Patten" *Annals of the American Academy of Political and Social Science* (Suppl. May 1923): 353.
- <sup>39</sup> Simon Patten, *The Economic Basis of Protection* (Philadelphia: J. B. Lippincott Co., 1890), 137.
- <sup>40</sup> Patten, *Economic Basis of Protection*, 143.
- <sup>41</sup> Johnson named Phillips as the prime mover behind the Industrial Commission. See his *Life of a University Professor*, 32. On the origins of the Industrial Commission, see Clarence Wunderlin, *Visions of a New Industrial Order* (New York: Columbia University Press, 1992), 28–29.
- <sup>42</sup> *Preliminary Report of the Industrial Commission* (Washington, DC: Government Printing Office, 1900), 9.
- <sup>43</sup> E. Dana Durand, "The United States Industrial Commission: Methods of Government Investigation," *Quarterly Journal of Economics* 16 (1901–2): 568.
- <sup>44</sup> Johnson, *Life of a University Professor*, 32.
- <sup>45</sup> "Testimony of Prof. E.R. Johnson," *Report of the Industrial Commission on Transportation, Including Review of Evidence, Topical Digest of Evidence, and Testimony So Far as Taken May 1, 1900*, Hearings before the Industrial Commission, Mar. 3, 1899 (Washington, DC: Government Printing Office, 1900), 62.
- <sup>46</sup> Durand, "The United States Industrial Commission," 579.
- <sup>47</sup> Durand, "The United States Industrial Commission," 569, 566.
- <sup>48</sup> Johnson, *Life of a University Professor*, 32.
- <sup>49</sup> Nine individuals made up the commission. Rear Admiral John G. Walker served as its president; Col. Peter C. Hains and Lieut. Col. Oswald H. Ernst represented the United States Army; George S. Morison, William H. Burr, Alfred Noble, and Lewis M. Haupt represented the nation's nonmilitary civil engineers. Samuel Pasco, an attorney and former United States Senator from Florida, and Johnson rounded out the body. See Emory R. Johnson, "The Isthmian Canal: The Work and Report of the Commission," *Review of Reviews* (Jan. 1902): 36.
- <sup>50</sup> On universities as national institutions, see Eisenach *The Lost Promise of Progressivism*, 2, 18; Olivier Zunz *Why the American Century?* (Chicago: University of Chicago Press, 1998), xi–xii; Robert Wiebe *Self-Rule: A Cultural History of American Democracy* (Chicago: University of Chicago Press, 1995), 141–43.
- <sup>51</sup> Steven Sass, *The Pragmatic Imagination: A History of the Wharton School, 1881–1981* (Philadelphia: University of Pennsylvania Press, 1982), 119.
- <sup>52</sup> "Charles Custis Harrison," *Dictionary of American Biography* (New York: Charles Scribner's Sons, 1831), IV, 336–37; Sass, *The Pragmatic Imagination*, 85.
- <sup>53</sup> Johnson, *Life of a University Professor*, 33.
- <sup>54</sup> "Isthmian Commission's Plans: Several Members to Visit Paris and All to Go South Later," *New York Times*, July 9, 1899, 8.
- <sup>55</sup> Johnson notes that he collected data for his report during "the latter half of 1899." *Report of the Isthmian Canal Commission, 1899–1902*, Appendix NN, 515.
- <sup>56</sup> *Report of the Isthmian Canal Commission, 1899–1901* (Washington, DC: Government Printing Office, 1901), Senate Document 54, 57th Congress, 1st Session. The report's appendices, including Johnson's contribution, appeared in the 1902 publication of Senate document 54, Part 2. A third version of the report, containing some

materials not present in the original document and appendices, such as Johnson's above observation, did not appear until 1904 as Senate document no. 222 of the 58th Congress, 2nd session.

<sup>57</sup> Emory R. Johnson, "Reasons for the Panama Route," *Independent* 54 (Feb. 1902): 314.

<sup>58</sup> *Report of the Isthmian Canal Commission on Proposal of New Panama Canal Co.* (Washington, DC: Government Printing Office, 1902), Senate document 123, 57th Congress, 1st session; Johnson, *Life of a University Professor*, 57–58.

<sup>59</sup> David McCullough, *The Path Between the Seas* (New York: Simon and Schuster, 1977), 324.

<sup>60</sup> Johnson, *Life of a University Professor*, 56.

<sup>61</sup> *Times* (Chattanooga), Nov. 13, 1900; clipping from Emory Johnson personnel file, University Archives, University of Pennsylvania.

<sup>62</sup> *News* (Savannah), May 15, 1900; clipping from Emory Johnson personnel file, University Archives, University of Pennsylvania.

<sup>63</sup> *Constitution* (Atlanta), Oct. 1, 1900; clipping from Emory Johnson personnel file, University Archives, University of Pennsylvania.

<sup>64</sup> *Leader* (Pittsburgh), Sept. 21, 1900; clipping from Emory Johnson personnel file, University Archives, University of Pennsylvania.

<sup>65</sup> *Chronicle-Telegraph* (Pittsburgh), Sept. 21, 1900; *Leader* (Pittsburgh), Sept. 22, 1900; *Herald* (McKeesport, PA), Sept. 24, 1900; clippings from Emory Johnson personnel file, University Archives, University of Pennsylvania.

<sup>66</sup> "The Isthmian Canal: The Work and Report of the Commission," *Review of Reviews* 25 (Jan. 1902): 35–48; "The Isthmian Canal in Its Economic Aspects," *Annals of the American Academy of Political and Social Science* 19 (Jan. 1902): 1–23; "Reasons for the Panama Route" *Independent* 54 (Feb. 1902): 313–15; "The Isthmian Canal: Factors Affecting the Choice of Route" *Quarterly Journal of Economics* 16 (Aug. 1902): 514–36; "The Panama Canal" *Independent* 55 (Apr. 1903): 764–70; "Isthmian Canal Traffic" *Quarterly Journal of Economics* 17 (Aug. 1903): 529–75; "The Panama Canal: The Title and Concession" *Political Science Quarterly* 18 (June 1903): 197–215; "The Panama Canal Question" *Independent* 55 (Dec. 1903): 3098–3101.

<sup>67</sup> *Times* (Philadelphia), Feb. 20, 1901.

<sup>68</sup> Unknown Indianapolis newspaper, Feb. 8, 1902; *Leader* (Cleveland), Feb. 2, 1902; clippings from Emory Johnson personnel file, University Archives, University of Pennsylvania.

<sup>69</sup> *Preliminary Report of the Isthmian Canal Commission* Senate document 5, 56th Congress, 2nd session (Washington, DC: Government Printing Office, 1900). The body submitted the report on Nov. 30, 1900.

<sup>70</sup> *Preliminary Report of the Isthmian Canal Commission*, 36, 37.

<sup>71</sup> Aldace F. Walker, "The Preliminary Report of the Isthmian Canal Commission," *The Forum* (Apr. 1901): 145, 137, 142.

<sup>72</sup> *Report of the Isthmian Canal Commission*, Part II (1902) Appendix NN – "Report on the Industrial and Commercial Value of the Canal," 304.

<sup>73</sup> *Report of the Isthmian Canal Commission*, Part II(1902), Appendix NN, 304, 519, 574, 537, 573.

<sup>74</sup> *Report of the Isthmian Canal Commission*, Part II(1902), Appendix NN, 316.

<sup>75</sup> Emory R. Johnson, "The Isthmian Canal: Factors Affecting the Choice of Route," *Quarterly Journal of Economics* 16 (1901–2): 514; *Report of the Isthmian Canal Commission* (1904), Appendix NN – "Report on the Industrial and Commercial Value of the Canal," 517, 525.

<sup>76</sup> *Report of the Isthmian Canal Commission* (1902), Appendix NN, 310, 317.

<sup>77</sup> Emory R. Johnson, "Principles of Governmental Regulation of Railways," *Political Science Quarterly* (1900): 48; "Inland Waterways," 54.

- <sup>78</sup> *Report of the Isthmian Canal Commission*, Part II(1902), 382.
- <sup>79</sup> "The Canal and the Railways," *Commercial* (New York), Jan. 22, 1901; clipping from Emory Johnson personnel file, University Archives, University of Pennsylvania.
- <sup>80</sup> Walt Griffin, *George W. Goethals and the Panama Canal* (Cincinnati, OH: University of Cincinnati dissertation, 1988), 483.
- <sup>81</sup> Griffin, *Goethals and the Panama Canal*, 490.
- <sup>82</sup> American businessmen writing to urge a quick resolution to the tolls issue included J. A. Farrell, president of United States Steel; R. N. Sewell of Howard Holder Shipping Agents; J. W. Ryan of the New York and South America Line, all to Goethals June 6, 1911. Materials found in Papers of the Isthmian Canal Commission, Folder 92-B.
- <sup>83</sup> Emory Johnson to George W. Goethals, June 7, 1911, Records of the Isthmian Canal Commission, U.S. National Archives RG 185.6, Folder 92-B.
- <sup>84</sup> Emory Johnson to George W. Goethals, June 12, 1911, George W. Goethals papers, Box 14, Library of Congress; Johnson, *Life of a University Professor*, 88.
- <sup>85</sup> Johnson, *Life of a University Professor*, 88.
- <sup>86</sup> Johnson, *Life of a University Professor*, 89.
- <sup>87</sup> "Statement of Dr. Emory R. Johnson, Special Commissioner on Panama Canal Traffic and Tolls," Apr. 10, 1912, in *Hearings before the Committee on Interoceanic Canals, United States Senate, Sixty-second Congress, Second Session on H.R. 21969* (Washington, DC: Government Printing Office, 1912), 16.
- <sup>88</sup> W. C. Adamson to H. L. Stimson, Jan. 6, 1912, Papers of the Isthmian Canal Commission, U.S. National Archives, Record Group 186.5, File 92-B-18; H.L. Stimson to Adamson, Jan. 11, 1912, Papers of the Isthmian Canal Commission, File 92-B-18. Adamson (D-GA) was chairman of the House Committee on Interstate and Foreign Commerce at the time. See *Biographical Directory of the United States Congress*, <http://bioguide.congress.gov/scripts/biodisplay.pl?index=A000051>.
- <sup>89</sup> Emory Johnson, "Statement before House Committee on Interstate and Foreign Commerce," Jan. 30, 1912 in *The Panama Canal: Hearings before the Committee on Interstate and Foreign Commerce, House of Representatives, Sixty-second Congress, Second Session, Document No. 680* (Washington, DC: Government Printing Office, 1912), 731, 770.
- <sup>90</sup> "Statement of Dr. Emory R. Johnson," Apr. 10, 1912, 39.
- <sup>91</sup> Emory Johnson to George Goethals, Apr. 13, 1912, Records of the Isthmian Canal Commission, File 92-B; Emory Johnson to George Goethals, July 19, 1912, Records of the Isthmian Canal Commission, File 92-B; Emory Johnson, *The Relation of the Panama Canal to the Traffic and Rates of the American Railroads*, 62<sup>nd</sup> Congress, 2<sup>nd</sup> Session, Document no. 875 (Washington, DC: Government Printing Office, 1912). Senator Frank Brandegee (R-CT) served as chairman of the Senate Committee on Interoceanic Canals and the Committee on Panama during the Sixty-second Congress (Mar. 4, 1911–Mar. 4, 1913). See "Brandegee, Frank Bosworth, 1864–1924" in *Party Leaders in Congress, 1789–2002: Vital Statistics and Biographical Sketches* (New York: Nova Science Publishers, 2002), 45.
- <sup>92</sup> Emory Johnson to George Goethals, June 17, 1912, Box 16, George W. Goethals papers, Manuscript Division, Library of Congress, Washington DC.
- <sup>93</sup> Henry L. Stimson to the president, Aug. 19, 1912, Stimson Papers, Microfilm Reel. 10, v. 1, no. 433.
- <sup>94</sup> Emory R. Johnson, *Panama Canal Traffic and Tolls* (Washington, DC: Government Printing Office, 1912), 191–95.
- <sup>95</sup> Public Law 62–337, *The Panama Canal Act*, Section 5.

- <sup>96</sup> William Howard Taft, "Proclamation 1225—Panama Canal Toll Rates," Nov. 13, 1912. Available online at [www.presidency.ucsb.edu/ws/?pid=87365](http://www.presidency.ucsb.edu/ws/?pid=87365).
- <sup>97</sup> Johnson, *The Relation of the Panama Canal to the Traffic and Rates of American Railroads*, 41.
- <sup>98</sup> Henry L. Stimson, "Some Problems of the Panama Canal," Address before the Commercial Club of Kansas City, Nov. 14, 1911 (Washington, DC: Government Printing Office, 1911).
- <sup>99</sup> Stimson, "Some Problems of the Panama Canal," 4, 6.
- <sup>100</sup> Stimson, "Some Problems of the Panama Canal," 7, 11, 9.
- <sup>101</sup> Johnson, *Life of a University Professor*, 96.
- <sup>102</sup> Henry L. Stimson to Albert P. Schack, July 16, 1912, Stimson Papers, microfilm reel 10, v. 1, no. 307. Stimson used virtually the same language in his Annual Report for 1912. See Report of the Secretary of War to the President (Washington, DC, Dec. 2, 1912), 57. Available online at <http://babel.hathitrust.org/cgi/pt?q1=special%20industry;id=mdp.39015035990251;view=plaintext;seq=61;num=57;start=1;sz=10;page=search>.
- <sup>103</sup> *The Panama Canal: Hearings before the Committee on Interstate and Foreign Commerce, House of Representatives, Sixty-second Congress, Second Session, Apr. 4, 1912* (Washington, DC: Government Printing Office, 1912), 959; *The Panama Canal: Hearings before the Committee on Interoceanic Canals, United States Senate, Sixty-second Congress, Second Session, Mar. 29, 1912* (Washington, DC: Government Printing Office, 1912), 708–9.
- <sup>104</sup> Henry Stimson to William Howard Taft, Dec. 18, 1912, Stimson Papers, microfilm reel 10, v.2, no.103–5.
- <sup>105</sup> Emory Johnson, "The Value of the Panama Canal to This Country," Page Lecture Series, Sheffield Scientific School, Yale University, 1913, 101–3.
- <sup>106</sup> *Bulletin* (Philadelphia), Apr. 28, 1913.
- <sup>107</sup> Emory Johnson, "Panama Canal Tolls" Address before the Traffic Club of Pittsburgh, Jan. 30, 1913, in Emory Johnson personnel file, University Archives, University of Pennsylvania; *Ledger* (Birmingham), Oct.29,1913.
- <sup>108</sup> John Milton Cooper, Jr., *Woodrow Wilson: A Biography* (New York: Knopf, 2009), 249–50.
- <sup>109</sup> Daniel Rodgers *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge, MA: Belknap Press of Harvard University Press, 1998), 26; Theda Skocpol *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States* (Cambridge, MA: Harvard University Press, 1992), 45.
- <sup>110</sup> *National Cyclopedia of American Biography*. 36, 459; Emory R. Johnson Membership File, UL.IV.3, Courtesy of The Abraham Lincoln Foundation of The Union League of Philadelphia, The Union League of Philadelphia Archives, Philadelphia, PA.
- <sup>111</sup> *National Cyclopedia of American Biography*. 36, 459.