The Creation and Destruction of the 1890 Federal Census

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Abstract

The single-family population schedule for the Eleventh Census of the United States taken in 1890 was significantly more voluminous and vulnerable than its predecessors. Recordkeepers at the time failed to copy the schedules or to bind them, driven both by the era's pervasive fiscal conservatism and bureaucratic hubris over the first use of the Hollerith electrical tabulating machines. Thus the stage was set for the infamous fire of 10 January 1921. The loss of a large portion of the 1890 census did not, as previously assumed, spur the creation of the National Archives. Nevertheless, the impact of the fire and subsequent disposal of the remnants of the census left a permanent void in the historical record.

The 1890 federal census is important historically quite apart from its notoriety as an archival horror story. It seems entwined with claims of American exceptionalism. In 1890, one hundred years after the First Census, census takers counted Americans at a crucial turning point in their history, as the country was completing its transition from a rural-agricultural republic to an urban-industrial empire. The 1890 census seemed to take measure of the nation's identity. In 1893, for example, Frederick Jackson Turner cited its findings to pronounce the western frontier closed in his address, "The Significance of the Frontier in American History," perhaps the single most influential essay in American historiography. Thirty years later, in the early 1920s, congressional proponents of immigration restriction incorporated the tabulations of the 1890 census as the legal baseline for calculating the quotas of immigrant groups to be accepted from each country. These 1920s immigration laws fundamentally shaped the demography of the country for decades.[1] Thus, in a larger sense, at least in the minds of frontier

I wish to thank David A. Wallace of the University of Michigan for his comments on an earlier draft of this article.

[1] Turner's essay opens with a quotation from a bulletin of the superintendent of the 1890 census; see Frederick Jackson Turner, *The Frontier in American History* (Tucson: University of Arizona Press, 1986), 1. The 1890 baseline was used until 1927, when national origins revealed in the 1920 census were employed; see John Higham, *Strangers in the Land: Patterns of American Nativism 1860–1925* (New Brunswick, N.J.: Rutgers University Press, 1955), 319–24.

mythologizers and immigration opponents, the 1890 census seemed to offer evidence on the perennial question, *What is an American?*

On a more practical level, the 1890 census was noteworthy as the first census to be counted and tabulated using electrical machines. It was also the first federal census to provide a separate schedule form for each family, a method (now standard) that would not be used again until 1970. Compared to its predecessors, the 1890 census asked the largest number of questions, employed the largest number of enumerators, published the most voluminous results, and was the most expensive census when completed in the late 1890s. In part because of its scale and complexity, and because of some controversy surrounding its results, the 1890 census gave substantial impetus to the movement to create a permanent census bureau in the federal government, which occurred in 1902.

Aside from its bureaucratic significance or its role in the culture wars of its era, the enduring legacy of the 1890 census stems from its "destruction" in a fire on 10 January 1921. The resulting gap in the documentary record is well known to genealogists and social historians; political scientists, sociologists, and other scholars also have had to work around the evidential voids. Remarkably little, however, has been written about the causes of the census's destruction or its significance for archival preservation. Four questions arise from the existing literature: 1) What characteristics of the 1890 census records made them particularly vulnerable to fire? 2) What was the quality of custodianship of the records before and after the fire? 3) What role did the loss of the 1890 census play in the establishment of the National Archives? 4) How consequential was the loss of the records to future scholarship and research?

Scholarly literature, as well as contemporary reports, suggests that the 1890 census was indeed peculiarly vulnerable to fire. First—and most commonly noted—only one set of returns was created. Second, the sheer bulk of the records was another factor, exacerbated by an adverse custodial environment, both physical and administrative. Responsibility for these failings is ultimately traceable to the political culture of the times, a dimension largely neglected by previous analyses. Although a number of writers point to the shock and remorse over the destruction of the census in 1921 as contributing to the establishment of the National Archives in 1934, the actual effect of the census fire is more ambiguous. The magnitude of the loss is also somewhat overstated. Slighted in most accounts is the fact that all of the statistical data of the census had been extracted and published long before the fire. But, of course, later writers lament the loss of what Schellenberg refers to as the "informational values" in the census schedules, the individual names associated with the millions of data points.[2] While it is true that

[2] Theodore Schellenberg, "The Appraisal of Modern Public Records," in *A Modern Archives Reader: Basic Readings in Archival Theory and Practice*, ed. Maygene F. Daniels and Timothy Walch (Washington, D.C.: National Archives and Records Service, 1984), 58.

virtually all of the names specific to 1890 perished, overlooked remnants and alternative sources compensate partially for the information that vanished in the flames. In the end, however, it must be acknowledged that nothing can fully substitute for the "lost census."

Literature Review

The first analyses of the 1890 census were offered on the very heels of its completion, and they give insight into the vulnerabilities that set the stage for the 1921 fire. Writing in 1899, William C. Hunt, the chief statistician of the Twelfth Census, emphasized the bureaucratic discontinuity and administrative overload that plagued the temporary census offices of the nineteenth century. As he complained, "Each census is a law unto itself. . . ."[3] Hunt asserted that management of records was lax and that no one was properly prepared to handle the logistics of processing up to twenty-five million census schedules.

While Hunt provides a valuable view of the ad hoc and overwhelmed bureaucratic context in which the 1890 census was produced, Carroll D. Wright, his superior at the Census Office, illuminates some of the details of the 1890 census records. Wright shows that the volume of the Eleventh Census was considerably larger than all of the previous ten censuses combined. Wright's 1900 report is also among the few works to explain why the single-family schedule, the chief culprit in that bulk, was adopted in the first place—apparently as a labor-saving device for the enumerators. Wright implies that this same reasoning may have driven the ill-fated decision not to make copies. In his conclusion on the 1890 census, he notes that portions of it (schedules relating to mortality, special classes, and crime) burned in a fire in March 1896, a warning of the vulnerability of the records that went unheeded.[4]

In a 1914 article, Walter F. Willcox addresses indirectly why the warning was ignored. He discusses the broader context of the census bureaucracy during the post-1900 custodianship of the records. After the Bureau of the Census was made permanent in 1902 and transferred from the Interior Department to the Department of Commerce and Labor in 1903, Willcox recounts a protracted period of departmental infighting over the degree of independence that the bureau would enjoy under the commerce and labor secretary. He concludes that the Census Bureau lost that fight by fiat, and that its bureaucratic status remained murky in the years before 1921. Willcox, like Hunt, compares the

[3] William C. Hunt, "The Scope and Method of the Federal Census," *Publications of the American Economic Association*, New Series, No. 2, The Federal Census. Critical Essays by Members of the American Economic Association (March 1899): 492.

[4] Carroll D. Wright, *The History and Growth of the United States Census*, prepared for the Senate Committee on the Census (Washington, D.C.: GPO, 1900), 69–79.

complexity of census taking to waging war, and it seems probable that a bureau that remained underfunded, understaffed, and overworked neglected its older records.[5]

Later scholarly works, most notably by A. Ross Eckler in 1972 and Margo J. Anderson in 1988, confirm and elaborate this assessment of the pre-1921 Bureau of the Census. Eckler underscores the primary emphasis on statistical work and—along with Anderson—makes little or no mention of records management. But Eckler does indicate the marginality of the bureau even during the World War I emergency, when statistics about the country were much in demand. Anderson, in her more detailed account, describes an agency in a "malaise" for the better part of the 1910s, where employees "soon learned that if they wanted to advance their careers, they had to leave the bureau."[6] Anderson's interpretation of the war years is somewhat more positive than Eckler's, but she surmises that the war was too short to bring about any fundamental changes in the bureau's status. As the bureau entered the 1920s, it began to attract more attention, but not the kind to foster the bigger budgets and staff increases that might have improved recordkeeping. Rather, Anderson notes, despite the fact that the dynamic Herbert Hoover was now secretary of commerce, the bureau became mired in congressional battles over reapportionment and immigration.

Oddly, Anderson makes no reference to the 1921 fire in her "social history" of the census, and in fact, very few genealogical or historical works focus on the causes of the fire. Certainly, numerous genealogy guides mention the famous missing census. In his standard *Researcher's Guide to American Genealogy,* for example, Val D. Greenwood discusses the 1890 census as part of a broader overview of missing census records. Like most writers, he assumes that the destruction just happened as a kind of "act of God" and devotes little attention as to why the 1890 census was the most severely damaged of all of the records present in the basement of the Department of Commerce Building in 1921. Daniel P. O'Mahony gives somewhat more detail and emphasizes that no copies were made of the 1890 census, noting that in 1921, "the stacks and rows of documents piled up outside the fireproof vault represented the only copy . . . [of] the only census that had no duplicate copies." Like many writers, O'Mahony somewhat facilely traces the origins of the National Archives to the 1921 fire.[7]

[5] Walter F. Willcox, "The Development of the American Census Office since 1890," *Political Science Quarterly* 29, no. 3 (September 1914): 438–59.

[6] A. Ross Eckler, *The Bureau of the Census* (New York: Praeger, 1972); Margo J. Anderson, *The American Census: A Social History* (New Haven: Yale University Press, 1988), 127.

[7] Val D. Greenwood, *The Researcher's Guide to American Genealogy,* 3rd ed. (Baltimore: Genealogical Publishing, 2000); Daniel P. O'Mahony, "Lost But Not Forgotten: The U.S. Census of 1890," *Government Publications Review* 18 (1991): 35.

By far the most exhaustive treatment of the 1921 fire and its aftermath is Kellee Blake's 1996 article, "'First in the Path of the Firemen': The Fate of the 1890 Population Census." Blake sees the destruction of the 1890 census as a "genuine tragedy of records." Although she, too, remains silent on the issue of why the Eleventh Census was unprotected in 1921, Blake supplies detailed information found nowhere else as to the extent of the damage to the 1890 records and other censuses. But perhaps her most important contribution is the revelation that the damaged remnants of the 1890 census were actually stored for more than a decade after the fire, until Congress authorized their destruction in 1934 or 1935. This fact raises further questions about records management at the time, or lack thereof. Blake also highlights an important alternative source to the 1890 population schedules—the 1890 Civil War veterans schedules. Nevertheless, she reiterates that there is no "real balm" for the loss of the general schedules.[8]

Blake's interpretation implies a connection between the fire and the founding of the National Archives. Yet although this interpretation arises often in popular and scholarly writings on the 1890 census, it does not appear in standard histories of the National Archives, such as those by Donald R. McCoy and Victor Gondos. Interestingly, McCoy does not even mention the fire, although he telescopes much of the pre-1934 history of the archives into a few pages. McCoy notes that the movement for a national archives long predated 1921 and that many other examples of lost or damaged records could have inspired it. Gondos focuses on the efforts of J. Franklin Jameson to establish a national archival institution, and he argues that the 1921 fire temporarily reinvigorated the campaign of advocacy and proposals that ebbed and flowed over a long period. He indicates that the influence of the 1921 event could not be considered decisive.[9]

If, in the eyes of these scholars, the loss of the 1890 census might be considered only a blip in the history of the National Archives, for many others, particularly those involved in genealogical research, the event looms much larger. The majority of authors echo Blake's sentiments: the fire (and subsequent disposal of records) left a serious void in the historical record of ordinary Americans. It is important to note, however, that most of these authors wrote before the advent of online genealogy. Curt B. Witcher and Suzanne Russo provide a needed corrective to the catastrophic view of the 1921 fire. They assert that the evidential void, while still very real, is no longer quite as gaping as once

[8] Kellee Blake, "'First in the Path of the Firemen': The Fate of the 1890 Population Census," *Prologue Magazine* 28, no. 1 (Spring 1996), pts. 1–2, available at http://www.archives.gov/publications/prologue/1996/ spring/1890-census-1.html, accessed 15 June 2008.

[9] Donald R. McCoy, *The National Archives: America's Ministry of Documents, 1934–1968* (Chapel Hill: University of North Carolina Press, 1978); Victor Gondos, Jr., *J. Franklin Jameson and the Birth of the National Archives, 1906–1926* (Philadelphia: University of Pennsylvania Press, 1981).

thought, thanks to digital technology and the collaborative efforts of commercial genealogical information providers, libraries, and the National Archives to construct a substitute from formerly dispersed and difficult to obtain alternative sources.[10]

Conditions of Vulnerability

Two decisions were critical to making the 1890 census vulnerable to fire in the Commerce Building on 10 January 1921: first, the decision to produce only one copy of the schedules for processing, and second, the choice to use the bulky single-family general population schedule. The former decision made the originals precious; the latter made them a particular burden.

In assessing responsibility for these decisions, we must follow the trail of evidence not to any single person, but to prevalent tendencies in the political culture of Gilded Age America. First, and foremost, the census—like much of the rest of the federal government—was "traditionally a casual and slipshod operation," as Morton Keller observes in his classic study of late nineteenth-century public life.[11] "Government economy"—keeping it small and on the cheap—were the watchwords of both major political parties. Most departments of the government were laughably small by today's standards. The Post Office was the largest government agency at the time, employing nearly two-thirds of all federal employees in 1891. The Census Office was under the Interior Department, otherwise known as the "Great Miscellany," which encompassed over twenty agencies with wide-ranging mandates, including pensions, education, railroad regulation, and Indian affairs. Keller characterizes the Interior Department in these terms: "stagnation, inefficiency, occasional corruption, an inability to cope with rising levels of work." In the late 1880s, for example, its Land Office had a claims backlog of over three years.[12]

The Census Office was in a worse predicament, because it was largely temporary. William C. Hunt, in his 1899 analysis, recounts the absurdity of the 1880 Census Office dwindling from "25 divisions . . . to a single census division . . . and finally to a single census clerk." Some of the statistical and publications work involving the 1880 census, dragging on late in the decade, had to be dropped as attention turned to 1890. Congress drafted legislation on the fly and

[10] Curt B. Witcher, "Blazing New Trails: Reconstruction of the 1890 Census," *Ancestry Magazine* 18, no. 2 (March 2000), available at http://www.ancestry.com/learn/library/article.aspx?article=2504; Suzanne Russo, "On the Frontier: Ancestry's 1890 Census Substitute," *Ancestry Daily News* (30 March 2000), available at http://www.ancestry.com/learn/library/article.aspx?article=766. Both accessed 18 August 2008.

[11] Morton Keller, *Affairs of State: Public Life in Late Nineteenth Century America* (Cambridge, Mass.: Harvard University Press, 1977), 102.

[12] Keller, *Affairs of State,* 315.

thoughtlessly reproduced many of the flaws in the 1880 schedules, including the unprecedented number of questions—in fact, adding a few. An official later testified that for guidance in designing the 1890 forms "we had only a few scrapbooks that some one had had the forethought to use in saving some of the forms of blanks in the last census. He had taken them home, a few copies at a time, and put them into scrapbooks. The Government had taken no care of these things in 1885, when the office was closed up." Superintendent Robert P. Porter, the worst of it behind him, recalled that "[o]n the morning of 17th April, 1889, the Bureau did not exist. At noon on that day the President handed me a commission, and . . . the Census Office was ushered into existence. The result of that day's labour was the appointment of a chief clerk and a messenger boy." Within little more than a year, the office grew until it occupied ten buildings, employing "3,000 clerks, 2,500 special agents, 150 experts," in addition to the enumerators, "an army of 50,000 on the pay rolls."[13] To complicate matters further, Congress kept submitting "amendments to the Act just previous to the date fixed for the enumeration," an official noted later, which "materially added to the already overburdened schedules." According to Census Bureau historian W. Stull Holt, more than 120 million copies of 2,400 different census forms were finally printed.[14] From this assortment, upward of twenty-five million blank population schedules were circulated, on which data was collected regarding sixty-two million individuals spread across a continent, all within a period of no more than a few weeks. Afterward, the Washington office had to tabulate statistics on these millions of forms and publish tens of thousands of pages of results—before the office itself expired in 1895.

Given the logistics of this undertaking, and further constrained by the dictates of "government economy," census officials might readily justify a no-copy policy. When the 1890 Census Office was created, the government had just begun to address the problem of what to do with its already burgeoning records. Only two months earlier, on 16 February 1889, Congress passed an "Act to authorize and provide for the disposition of useless papers in the Executive Departments," perhaps the most significant federal records management measure of the nineteenth century. The act was the endpoint of a debate set in motion by a fire at the Interior Department in 1877—and, more generally, by the post–Civil War growth of the federal bureaucracy—which included the option of constructing a vast fireproof "Hall of Records." But rather than incur this expense, Congress instead set up the disposal procedure that came to be embodied in the "useless

[13] Hunt, "Scope and Method," 470; W. Stull Holt, *The Bureau of the Census: Its History, Activities and Organization* (Washington, D.C.: Brookings Institution, 1929), 27; Robert P. Porter, "The Eleventh United States Census," *Journal of the Royal Statistical Society* 57, no. 4 (1894): 648.

[14] William R. Merriam, "The Census of 1900," *North American Review* 170, no. 518 (January 1900): 100; Holt, *Bureau of the Census*, 28.

papers reports" of the next several decades.[14] The remnants of the 1890 census were themselves among the last records disposed of under this act, which was to be superseded by the law establishing the National Archives in 1934. Most immediately in 1889–90, even as the schedules and processes of the Eleventh Census were finalized, the quick and cheap solution to the federal government's records management problem had won the day. This political context necessarily encouraged any efforts to reduce the burden of paper.

Before 1880, the law for the census mandated two or more full copies. The 1880 census began the movement away from copies, requiring only a brief summary to be submitted to local officials. Both the 1880 and 1890 censuses asked an unprecedented number of questions, and the decision to restrict copying was only logical in an era when much of it was still done by hand. In the case of the 1890 census, it was not feasible to make carbon copies of the two-sided sheets. The legislation creating the 1890 census represented a "wise and radical departure in respect to copies," according to Carroll Wright. It stated that "upon the request of any municipal government . . . the Superintendent of the Census shall furnish such government with a copy of the names, with age, sex, birthplace and color, or race, of all persons enumerated within the territory in the jurisdiction of such municipality, and such copies shall be paid for by such municipal government at the rate of twenty-five cents for each one hundred names. . . ."[15] The law not only shifted the onus for local copies to local officials, it also promised to bring some needed revenue into the treasury. Apparently, few if any municipalities requested copies from the Census Office.

Enterprises such as the decennial census strained the "slipshod and casual" governance of the Gilded Age. Yet a countervailing tendency was also abroad in the political culture of the period: a movement toward professionalization and scientific expertise in government, and, as a side effect, centralization. The era is famous for its enthusiasm for civil service reform (the first major law passed in 1884), and reformers such as Gen. Francis A. Walker, superintendent of the 1880 census and later president of MIT, hoped to conduct the work of tabulating the census using more scientific methods. The major innovation of the 1880 census, and one that Walker wanted replicated in 1890, was to give the "central office at Washington adequate authority over the arrangements for taking the census."[16] Walker trained Robert P. Porter in statistics, and Porter oversaw the taking of the 1890 census and its tabulation until 1893. Porter was a journalist

[14] See Henry P. Beers, "Historical Development of the Records Disposal Policy of the Federal Government Prior to 1934," *American Archivist* 7 (July 1944): 183–87; Richard J. Cox, *Closing an Era: Historical Perspectives on Modern Archives & Records Management* (Westport, Conn.: Greenwood Publishing, 2000), 98.

[15] Carroll D. Wright, "How a Census Is Taken," *North American Review* 148, no. 391 (June 1889): 735; Wright, *History and Growth*, 948.

[16] Francis A. Walker, "The Eleventh Census of the United States," *Quarterly Journal of Economics* 2, no. 2 (January 1888): 159.

by profession, but his successor, Carroll Wright, was a full-fledged statistician; Wright, later commissioner of labor, held his post until the work of the census finally ended in 1897. More to the point, the 1890 census law, unlike any previous census legislation, specifically stipulated that "all of the clerks of classes four, three, and two" working in the Census Office "may be statistical experts."[17] It is likely, therefore, that this commitment to top-down professionalism exerted pressure to bring the census schedules to Washington as quickly as possible—without copying them.

From a records management perspective, the army of enumerators did its job only too well, if Commissioner Wright is to be believed. Twenty-five million schedules of all types, "weighing more than 300 tons," were supplied to them, he writes, of which "two-thirds to three-fourths . . . came back in the form of completed returns . . . without the loss of a single package."[18] An article appearing in *Scientific American* outlined the process for mailing the returns:

> The blanks which had been filled up were laid one upon the other on a piece of straw board. Each pile contained the schedules of a single enumerator. On top of all was placed an empty portfolio, to whose center was pasted the label with the enumerator's name and the designation of his district upon it. The bundle was then corded together and a number of such bundles, representing from 13 to 15 enumeration districts, were placed together in a box which they exactly fitted. The box, 27 inches long and about 18 in its other dimensions, properly closed and sealed, was sent in this shape to the Washington office.[19]

In the official mind, this precisely defined procedure may have furnished a sufficient sense of security—an illusion of proper custodianship—to assuage any doubts about the no-copy policy.

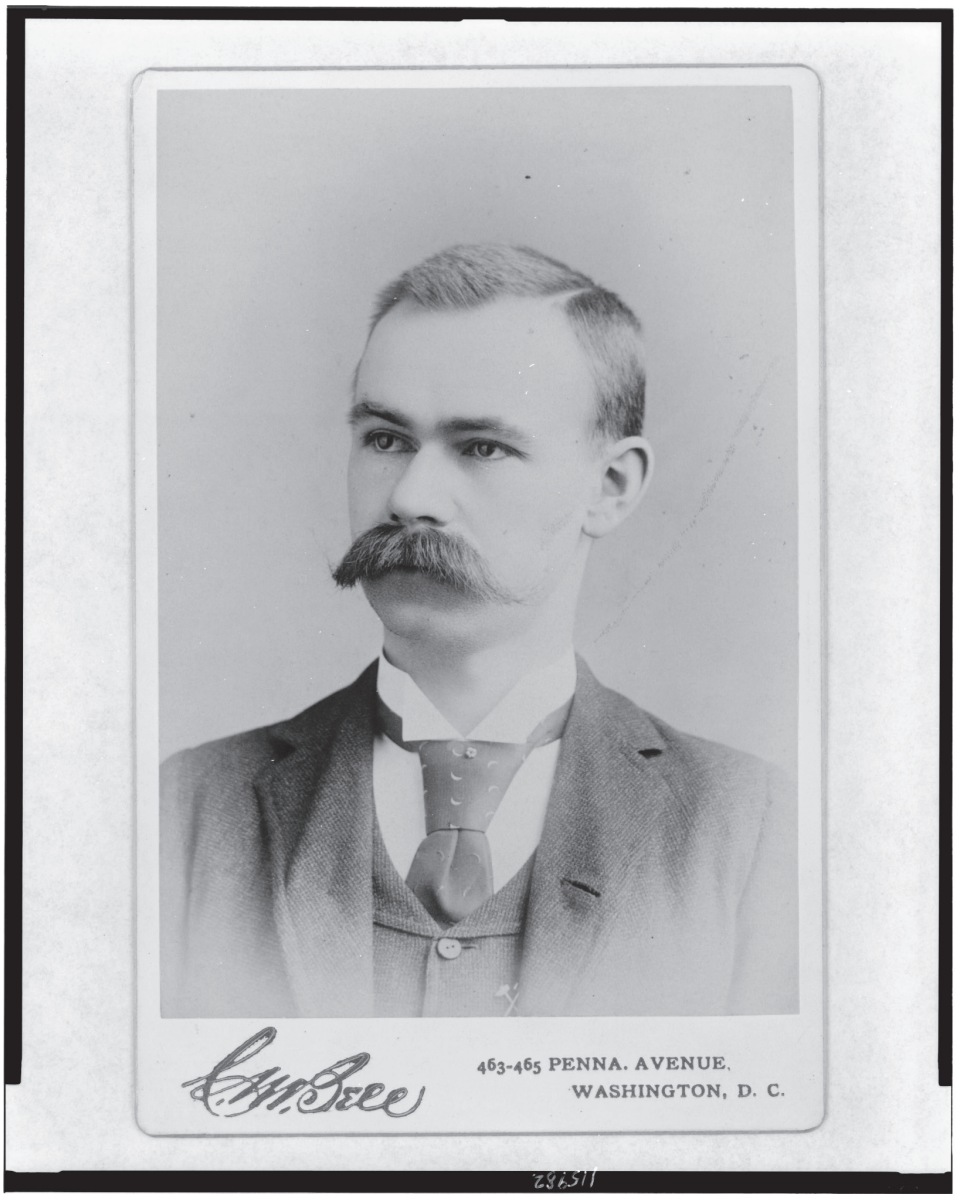
The fact that the new Hollerith tabulating machines also awaited the schedules' arrival may have provided still another compelling rationale for the no-copy decision, especially for officials who prized statistics. In their eyes, the intrinsic value of the schedules was necessarily lessened; the new-fangled punched cards were the thing. Herman Hollerith himself put it this way in 1889: "[T]he records must be put in such shape that a machine could read them." The punched cards became, in effect, not only a copy of the information, but its principal medium. It is true that, as Hollerith later emphasized, "a number was stamped on the card, so that . . . any one of the 62,000,000 cards could be readily identified and compared with the original return."[20] Yet, in

[17] Wright, *History and Growth*, 943.

[18] Wright, *History and Growth*, 71.

[19] "The Census of the United States," *Scientific American* 63 (30 August 1890): 132.

[20] Herman Hollerith, "An Electric Tabulating System," *The School of Mines Quarterly* 10, no. 16 (April 1889): 245; Hollerith, "The Electrical Tabulating Machine," *Journal of the Royal Statistical Society* 57, no. 4 (December 1894): 679.



Herman Hollerith, c. 1888. A former Census Office employee Hollerith invented a machine that used specially encoded punch cards, each representing an individual's census data. The cards were fed into the counting machine, where the punched holes allowed metal pins to complete an electric circuit. When a circuit was completed, the dial for the corresponding trait would go up. In 1896, Hollerith founded the Tabulating Machine Company. Later, after mergers and management changes, this company became the International Business Machines (IBM) Corporation.
For more, visit http://www.census.gov/history/www/technology/010873.html, accessed 23 June 2008.
Photograph by C. M. Bell. Prints & Photographs Division, Library of Congress, LC-USZ62-115982.

a paper before the American Statistical Association, Superintendent Porter revealed the official mindset when he noted that after the card punching was completed, "the punched card takes the place of the schedule. . . . Under the new system, when the cards are once correctly punched, the schedules are put away forever." The level of bureaucratic hubris was reflected in the unfortunate words of an 1891 article appearing in the *Electrical Engineer:* "Those schedules might every one of them be burned up, and the Eleventh Census could be taken over again from beginning to end, by means of the little slips of manilla [*sic*]. . . ."[21] But the cards were not in fact full copies of the schedules. A reference number tied a card to a particular schedule, as Hollerith asserted, but nothing on a card referred to the name of the individual whose vital statistics were represented by the punches on it. In neglecting to transfer such information to each card, census officials compounded their error in failing to provide for conventional copies of the schedules.

The impact of the Hollerith machines on the second critical decision regarding the creation of the Eleventh Census, the form of the single-family schedule, is less clear. Leon E. Truesdell, in his exhaustive treatment of the counts and tabulations undertaken in 1890, reveals no direct connection between the Hollerith system and the form of the schedule, other than noting a summary area on each sheet where enumerators could enter numbers used in the basic population counts.[22] Although the columnar form of the 1890 schedule, with only five names across the top (and five more on the verso), seemed to be simpler, more easily read, and better suited for use in data entry (or "transcription") than traditional census sheets with their dozens of rows, this consideration does not appear to lie behind its adoption. The 1890 population schedule seemed to be much easier for a keyboard-punch operator to scan visually, as a contemporary article in *Scientific American* implies: "Having a schedule at hand, the operator we may assume sees in it a family of six members; he strikes upon the key indicating that there is one family of six members." A test conducted in 1889 showed that the Hollerith system reduced transcription time by nearly 50 percent over conventional methods. Superintendent Porter, however, stated flatly on more than one occasion that the gains in speed and accuracy of transcription were entirely due to the new mechanical means available: "Instead of the multiplied motions required in transcription by the ordinary process of writing, one turn of the wrist suffices for the recording of each reported fact." Hollerith, too, referred not to the format of the schedules but to "a little practice" in operating the machines as the key to attaining "great

[21] Robert P. Porter, "The Eleventh Census," *Publications of the American Statistical Association* 2, no. 15 (September 1891): 330, 339; T. C. Martin, "Counting a Nation by Electricity," *Electrical Engineer* (11 November 1891): 525.

[22] Leon E. Truesdell, *The Development of Punch Card Tabulation in the Bureau of the Census 1890–1940* (Washington, D.C.: GPO, 1965), 57.

THE NEW CENSUS OF THE UNITED STATES—THE ELECTRICAL ENUMERATING MECHANISM.—[See page 132.]

The cover of the 30 August 1890 issue of *Scientific American* illustrates the use of the Hollerith machines in the Eleventh Census.

expertness . . . in making such transcriptions." Praising their work during the summer of 1890, Porter marveled that the operatives had "progressed in dexterity" from each counting 10,000 to 15,000 persons per day to almost 50,000 in the space of a few weeks.[23]

Far from viewing the single-family schedule as more readable and user friendly than past census sheets, Porter, indeed, complained that it was still "overloaded" with queries. If the form of the schedule was such a "matter of fundamental importance," as he acknowledged, what, then, was the motive behind its adoption?[24] As with many other aspects of the Eleventh Census, the single-family schedule was the product of "government economy" and the desire to avoid the costly problems of the Tenth Census. A section of an 1895 Census Office report on the "form of schedule" summarized the rationale:

> In the Tenth Census the inquiries made regarding each person enumerated were printed on large sheets of four pages each, containing spaces for 50 names to a page, or 200 names to a sheet. Whether for purposes of enumeration, examination, or tabulation, these large schedules were somewhat cumbersome, and for this reason and in order to test the use of a prior schedule . . . the form of the population schedule was changed and the family schedule . . . was adopted for use in the Eleventh Census. By use of the prior schedule is meant the distribution of the family schedule prior to the enumeration, for the purpose of having the answers to the inquiries filled in by the heads or responsible members of the families themselves, ready for collection by the census enumerators when they called.[25]

Census takers were paid on a per diem basis at rates of $2 to $6, depending on the type of enumeration. So, to curtail spending, some means had to be found to reduce the number of enumerators or reduce their time in the field, or both at once. In addition to the population schedule—a "formidable document," as Porter noted— "each enumerator . . . was armed with half-a-score special supplementary schedules, which . . . would have to be filled out."[26] Having individual householders enter the information themselves seemed not only a way to reduce labor hours, it also promised to improve the accuracy of the results.

[23] "The Census of the United States," 132; H. T. Newcomb, "The Development of Mechanical Methods of Statistical Tabulation in the United States, with Especial Reference to Population and Mortality Data" (paper presented at the Fifteenth International Congress on Hygiene and Demography, Washington, D.C., 23–28 September 1912), 7; Porter, "The Eleventh Census," 339; Hollerith, "An Electric Tabulation System," 249; Speech by Robert P. Porter, 1890, Box 21, Folder 4, Miscellany, Business Papers, Herman Hollerith Papers, Library of Congress Manuscript Division, Washington, D.C.

[24] Porter, "The Eleventh Census," 322; Porter, "The Eleventh United States Census," 649.

[25] U.S. Census Office, *Report on the Population of the United States at the Eleventh Census: 1890* (Washington, D.C.: GPO, 1895), ccii.

[26] Porter, "The Eleventh United States Census," 652.

The two previous censuses distributed at least some schedules prior to the actual census. Prior distribution was used after 1900, including the familiar multi-household sheets. Above all, as Carroll D. Wright pointed out in an 1889 article extolling the innovations of the forthcoming census, officials could look to the precedent of England, where prior schedules were already successfully in use.[27]

Although the 1890 census thus worked from existing models and anticipated modern practice, the plan to distribute schedules in advance appears to have been largely abortive. Despite their fixation on statistics, officials were never entirely frank about the number of prior schedules actually completed by householders. Porter was "unable to say" to what degree the prior schedule reduced the enumerators' workload, but his "impression" was that "in places where it was used intelligently and methodically it facilitated the work." But Wright, his successor as superintendent, predicted in 1889 that this aspect of the new census would be a "total failure," and he later admitted that the scheme was "not attempted to any extent, even in the larger cities, principally for want of time in which to make the necessary preparations." The logistics of census taking on the American scale overwhelmed the idea. A much larger and more sophisticated federal government in the 1960s took six years and a "tremendous amount of work" to prepare for distributing the single-family schedule of 1970.[28]

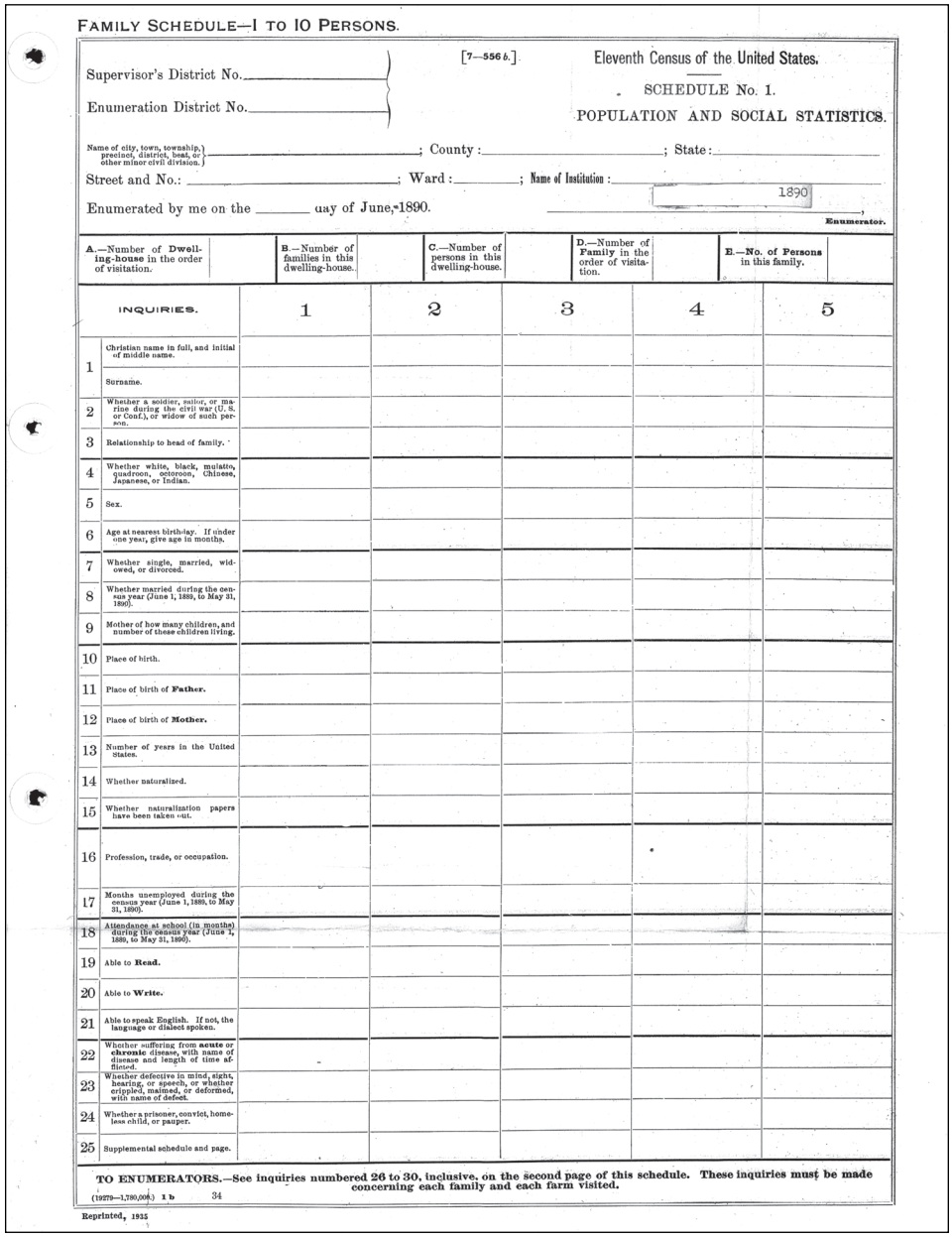
And, in the case of the 1890 census, some incentives pointed away from economy, toward padding the payroll. It is an interesting case of disparate strands of Gilded Age political culture playing against each other: government economy versus a third major tendency, intense partisanship. The party faithful had to be rewarded on a regular basis to ensure high turnouts in often closely competitive races. 1890 was an election year, and census enumerator jobs, though temporary, were political plums. Such an imperative made the "director of a vast scientific investigation into a dispenser of political patronage," Superintendent Porter noted ruefully. A total of 175 supervisors and 46,804 enumerators were eventually hired at all levels, and virtually all of them arrived on doorsteps with the single-family schedule in hand.[29]

"Of course a family schedule meant many million separate schedules to be filled and greatly increased the bulk of paper to be used," conceded the authors of the Census Office's 1895 report, yet their conclusion was sanguine: "[W]ith

[27] On advance distribution, see E. Dana Durand, "Taking the Census of 1910," *American Review of Reviews* 41, no. 5 (May 1910): 594; Wright, "How a Census Is Taken," 736.

[28] Porter, "The Eleventh Census," 330; Wright, *History and Growth*, 72; Wright, "How a Census Is Taken," 737; Hyman Alterman, *Counting People: The Census in History* (New York: Harcourt, Brace & World, 1969), 251.

[29] Robert P. Porter, "The Census of 1900," *North American Review* 165, no. 493 (December 1897): 664; Anderson, *The American Census*, 132. On Gilded Age partisanship, see Mark Wahlgren Summers, *Party Games: Getting, Keeping, and Using Power in Gilded Age Politics* (Chapel Hill: University of North Carolina Press, 2003).



FAMILY SCHEDULE—1 TO 10 PERSONS.

Supervisor's District No._____

Enumeration District No._____

[7—556 b.]

Eleventh Census of the United States.

SCHEDULE No. 1.

POPULATION AND SOCIAL STATISTICS.

Name of city, town, township, precinct, district, beat, or other minor civil division. _____; County: _____; State: _____

Street and No.: _____; Ward: _____; Name of Institution: _____

Enumerated by me on the _____ day of June, 1890. 1890

_____, Enumerator.

A.—Number of Dwelling-house in the order of visitation.	B.—Number of families in this dwelling-house.	C.—Number of persons in this dwelling-house.	D.—Number of Family in the order of visitation.	E.—No. of Persons in this family.

	INQUIRIES.	1	2	3	4	5
1	Christian name in full, and initial of middle name.					
	Surname.					
2	Whether a soldier, sailor, or marine during the civil war (U. S. or Conf.), or widow of such person.					
3	Relationship to head of family.					
4	Whether white, black, mulatto, quadroon, octoroon, Chinese, Japanese, or Indian.					
5	Sex.					
6	Age at nearest birthday. If under one year, give age in months.					
7	Whether single, married, widowed, or divorced.					
8	Whether married during the census year (June 1, 1889, to May 31, 1890).					
9	Mother of how many children, and number of these children living.					
10	Place of birth.					
11	Place of birth of **Father.**					
12	Place of birth of **Mother.**					
13	Number of years in the United States.					
14	Whether naturalized.					
15	Whether naturalization papers have been taken out.					
16	Profession, trade, or occupation.					
17	Months unemployed during the census year (June 1, 1889, to May 31, 1890).					
18	Attendance at school (in months) during the census year (June 1, 1889, to May 31, 1890).					
19	Able to **Read.**					
20	Able to **Write.**					
21	Able to speak English. If not, the language or dialect spoken.					
22	Whether suffering from **acute** or **chronic** disease, with name of disease and length of time affected.					
23	Whether defective in mind, sight, hearing, or speech, or whether crippled, maimed, or deformed, with name of defect.					
24	Whether a prisoner, convict, homeless child, or pauper.					
25	Supplemental schedule and page.					

TO ENUMERATORS.—See inquiries numbered 26 to 30, inclusive, on the second page of this schedule. These inquiries must be made concerning each family and each farm visited.

(19279—1,780,000) 1 b 34

Reprinted, 1935

1890 Federal Census Single-Family Schedule (recto). U.S. Census Bureau, *Measuring America: The Decennial Censuses from 1790 to 2000* (Washington, D.C.: U.S. Department of Commerce, 2002), 22–23. *Courtesy of the Public Information Office, U.S. Census Bureau, available at www.census.gov, accessed 15 June 2008.*

SCHEDULE No. 1.—POPULATION AND SOCIAL STATISTICS.

	INQUIRIES.	6	7	8	9	10
1	Christian name in full, and initial of middle name.					
	Surname.					
2	Whether a soldier, sailor, or marine during the civil war (U. S. or Conf.), or widow of such person.					
3	Relationship to head of family.					
4	Whether white, black, mulatto, quadroon, octoroon, Chinese, Japanese, or Indian.					
5	Sex.					
6	Age at nearest birthday. If under one year, give age in months.					
7	Whether single, married, widowed, or divorced.					
8	Whether married during the census year (June 1, 1889, to May 31, 1890).					
9	Mother of how many children, and number of these children living.					
10	Place of birth.					
11	Place of birth of **Father.**					
12	Place of birth of **Mother.**					
13	Number of years in the United States.					
14	Whether naturalized.					
15	Whether naturalization papers have been taken out.					
16	Profession, trade, or occupation.					
17	Months unemployed during the census year (June 1, 1889, to May 31, 1890).					
18	Attendance at school (in months) during the census year (June 1, 1889, to May 31, 1890).					
19	Able to **Read.**					
20	Able to **Write.**					
21	Able to speak English. If not, the language or dialect spoken.					
22	Whether suffering from **acute** or **chronic** disease, with name of disease and length of time afflicted.					
23	Whether defective in mind, sight, hearing, or speech, or whether crippled, maimed, or deformed, with name of defect.					
24	Whether a prisoner, convict, homeless child, or pauper.					
25	Supplemental schedule and page.					

26	Is the home you live in hired, or is it owned by the head or by a member of the family?	
27	If owned by head or member of family, is the home free from mortgage incumbrance?	
28	If the head of family is a farmer, is the farm which he cultivates hired, or is it owned by him or by a member of his family?	
29	If owned by head or member of family, is the farm free from mortgage incumbrance?	
30	If the home or farm is owned by head or member of family, **and mortgaged,** give the post-office address of owner.	

TO ENUMERATORS.—The inquiries numbered 26 to 30, inclusive, must be made concerning each family and each farm visited.

(19279—1,780,000.) 2 b

1890 Federal Census Single-Family Schedule (verso). U.S. Census Bureau, *Measuring America: The Decennial Censuses from 1790 to 2000* (Washington, D.C.: U.S. Department of Commerce, 2002), 22–23. *Courtesy of the Public Information Office, U.S. Census Bureau, available at www.census.gov, accessed 15 June 2008.*

ample accommodations and improved methods of tabulation they were easily handled." In nearly identical language Porter also pointed to the Hollerith system as obviating concerns over the volume of schedules, just as it had bolstered the no-copy policy: "[T]hey are easily handled until the punching is completed." The Census Office received the separate, meticulously packed boxes of schedules at the rate of approximately one hundred each day, a gradual inflow that initially may have obscured the total bulk from notice. Eventually, the total mounted to fifteen million schedules for the clerks to contend with (later counts put the total closer to 12.5 million sheets).[30] Combining this number with Wright's, basic arithmetic reveals a resulting mass of paper weighing in the range of 180 to 225 tons, conservatively.

Commissioner Wright gives a further perspective on the sheer bulk of the 1890 census, because of the single-family schedule. In his 1900 report, he asserts that all of the first ten censuses, from 1790 to 1880, were "in bound form and are contained in 4,597 volumes." But in comparison, "the population schedules alone" of the 1890 version, "if bound into volumes of uniform thickness, would make about 30,000 volumes, owing to the form of the schedule (*a*) adopted for the eleventh census."[31] This mass of paper, a potential treasure trove for genealogists and scholars of a later day, provided the fuel for the fire of 10 January 1921.

Custodianship Before and After the 1921 Fire

When assessing the quality of the custodianship of census records during the late nineteenth and early twentieth centuries, we must remember that their value for research was not widely understood at the time. Social history as we know it was in its infancy, and genealogy, far from being the major information industry that it is today, was pursued primarily by a relatively small number of well-heeled practitioners who were inspired, at least in part, by the pervasive nativism of the period. The Daughters of the American Revolution, for example, was founded in 1890. When census clerks and directors tried to explain the importance of preserving past census schedules, politicians and other government officials usually met them with incomprehension. It is fair to say that, for many contemporaries, the most recent census had the most compelling value, insofar as the enumerations might be involved in electoral reapportionment, or certain special schedules might provide information on recent economic conditions. In the case of the 1890 census, much of this information was compiled statistically and published by mid-decade.

[30] U.S. Census Office, *Report on the Population,* ccii; Porter, "The Eleventh Census," 330; "The Census of the United States," 132; Subcommittee of House Committee on Appropriations, *Sundry Civil Appropriations Bill for 1903,* 57th Cong., 1st sess., 1902, 172.

[31] Wright, *History and Growth,* 78.

For 1890, the Census Office changed the design of the population questionnaire. Residents were still listed individually, but a new questionnaire sheet was used for each family. Additionally, this was the first year that the census distinguished between different East Asian nationalities.

Across the top of the sheet were several organizational questions:

A. Number of dwelling house in the order of visitation by enumerator
B. Number of families in the dwelling house
C. Number of persons in the dwelling house
D. Number of this family in order of visitation by enumerator
E. Number of persons in this family

The following questions, listed by row number, were asked of each individual resident:

1. Christian name in full, and initial of middle name
2. Surname
3. Was this person a soldier, sailor, or marine during the Civil War (U.S.A. or C.S.A.), or the widow of such a person?
4. Relationship to the head of the family
5. Race
   - Enumerators were instructed to write "White," "Black," "Mulatto," "Quadroon," "Octoroon," "Chinese," "Japanese," or "Indian."
6. Sex
7. Age
8. Was the person single, married, widowed, or divorced?
9. Was the person married within the last year?
10. How many children was the person a mother of? How many of those children were living?
11. Person's place of birth
12. Place of birth of person's father
13. Place of birth of person's mother
14. How many years has the person been in the United States?
15. Is the person naturalized?
16. Has the person taken naturalization papers out?
17. Profession, trade, or occupation
18. Number of months unemployed in the past year
19. How many months did the person attend school in the past year?
20. Can the person read?
21. Can the person write?
22. Can the person speak English? If not, what language does he speak?
23. Is the person suffering from an acute chronic disease? If so, what is the name of that disease and the length of time affected?
24. Is the person defective of mind, sight, hearing, or speech? Is the person crippled, maimed, or deformed? If yes, what was the name of his defect?
25. Is the person a prisoner, convict, homeless child, or pauper?
26. Depending on the person's status in the questions in rows 22, 23, or 24, the enumerator would indicate on this line whether additional information was recorded about him on a special schedule.

The following questions, located at the end of each family's questionnaire sheet, were asked of each family and farm visited:

26. Was the home the family lived in hired, or was it owned by the head or by a member of the family?
27. If owned by a member of the family, was the home free from "mortgage incumbrance?"
28. If the head of the family was a farmer, was the farm which he cultivated hired or was it owned by him or a member of his family?
29. If owned by the head or member of the family, was the farm free from "mortgage incumbrance?"
30. If the home or farm was owned by the head or member of the family, and mortgaged, what was the post office address of the owner?

FIGURE 1. List of questions in the 1890 census. See http://www.census.gov/history/www/1890/011662.html.

So, as the prospect of the 1900 census drew nearer, official interest in the contents of the 1890 schedules—already undercut by the novelty of the Hollerith punched cards—necessarily waned. The compulsion to economize, however, did not. The final reports of the Census Office recorded the cost savings as the payroll dwindled from the tens of thousands down to 672 employees in June 1894, then to seventy total workers a year later. By 1897, the Census Office proper was demoted to a division within the Interior Department, consisting of "Mr. William A. King, the census clerk" and "a messenger and a charwoman assigned to the care of the building and the assistance of Mr. King." The report concluded, "Practically, therefore, the work of the Census Division, so far as the Eleventh Census itself is concerned, has been closed," except for "the only thing remaining": the "care and preservation of the records of the Eleventh and previous censuses."[32] Although Congress directed that steps be taken for the "proper preparation of the census schedules for preservation," Commissioner Wright noted, it was decided "by the committees having the appropriations in charge, by the Secretary of the Interior, and by myself that it was wise not to bind the schedules of the Eleventh Census in conformity with past custom . . . thus saving something over $30,000 in binding."[33]

The binding of the 1890 schedules had to await "future census legislation"—legislation that never came. This decision to postpone binding purely for shortsighted cost-cutting reasons was arguably as critical as the no-copy and single-schedule policies in the life cycle of the records. It exacerbated the fundamental problem of bulk and helps to explain why, at the time of the 1921 fire, the 1890 schedules were ultimately segregated from those of previous censuses. In 1897, the chief clerk, William A. King, knew only too well how the Eleventh Census was distinguished from its predecessors: "[T]he population schedules of this census alone will make five times as much as all the schedules of all the censuses preceding, and will require (if bound in volumes of uniform thickness) an amount of shelving equal to one row over 7,000 feet long." The comparison was moot; the 1890 schedules were not bound, but "remain in the portfolios as transmitted by the enumerators, being tied up with twine" and "piled flat in racks." They fared better at least than many of the special schedules, which at the time were "simply piled up here and there, accumulating dirt."[34]

This sorry situation is not surprising in light of the general history of custodianship of census records at the federal level. The original copies of the censuses of 1790 through 1820 were kept in the district courts of the various

[32] U.S. Census Division, *Report of the Commissioner of Labor in Charge of the Eleventh Census to the Secretary of the Interior for the Fiscal Year Ending June 30, 1897* (Washington, D.C.: GPO, 1897), 3, 5.

[33] U.S. Census Division, *Report of the Commissioner of Labor in Charge of the Eleventh Census to the Secretary of the Interior for the Fiscal Year Ending June 30, 1896* (Washington, D.C.: GPO, 1896), 3–4.

[34] U.S. Census Division, *Report of the Commissioner . . . 1897*, 9.

states until 1830, when a new law required them to be transferred to the State Department. It appears that some local clerks were lax about complying with the law or that records for a number of states were lost before 1830, because several states have censuses missing for those years. In 1849, all of the census records in the State Department were transferred to the Interior Department, which condoned the policy of lending the originals out to congressmen and other officials, resulting most probably in other losses. Inventories of census records were written in 1865, 1870, 1895 (itself missing!), and 1903.[35] This is the only evidence of "archival management" referred to in contemporary sources.

When William A. King wrapped up operations in 1897, the records of the censuses of 1790 through 1880, all bound, were housed in Room 216 in the attic of the Patent Office Building. A portion of the 1890 schedules was also there, while the remainder was kept in the basement and first floor of Marini's Hall on E Street, home of the Census Division. The pattern of segregating the 1890 schedules was already emerging, which in one form or another was to be the case until 1921. On 22 March 1896, a fire occurred at Marini's Hall that seriously damaged materials relating to manufactures, special classes, and vital statistics of the 1890 census, much of which had subsequently to be destroyed. In his report, King declared, "I do not consider this building at all suited for its present use. We have had one fire here . . . and I constantly fear another." King also feared the prospect of moving the 1890 population schedules; as he wrote, "I have had considerable experience in moving census material, and it has always resulted in much confusion, and sometimes loss, even when we had plenty of people fully acquainted with the material. . . . Now there are none."[36]

With no staff and virtually no budget, King still envisioned bringing together under one roof the 1790 through 1880 bound volumes with the 1890 schedules after they themselves were bound, "for convenience in reference and to maintain them in proper order." The volume of material alone would require a facility of at least 5,000 square feet, he estimated, "without considering the question of weight." Several years earlier, Superintendent Porter claimed a figure of "290 tons" for the whole of the 1890 census alone, including special schedules, plus an additional "180 tons" of punched cards. A later estimate put the total, excluding the cards, at over 400 tons.[37] Fortunately, some large portions of the Eleventh Census found homes elsewhere; the manufactures schedules were stored at the Patent Office Building, while the Civil War veterans schedules were put in the

[35] See the table in William Dollarhide, *The Census Book: A Genealogist's Guide to Federal Census Facts, Schedules, and Indexes* (Bountiful, Utah: Heritage Quest, 1999), 8; Greenwood, *Researcher's Guide*, 266.

[36] U.S. Census Division, *Report of the Commissioner . . . 1897*, 10.

[37] U.S. Census Division, *Report of the Commissioner . . . 1897*, 10; Porter, "The Eleventh Census of the United States," 681, 686; Subcommittee of House Committee on Appropriations, *Sundry Civil Appropriation Bill for 1903*, 172.

custody of the Pension Bureau. The 1896 fire further reduced the mass somewhat (an opportunity was also taken to destroy at least some of the punched cards at that time), but the estimated 180 to 225 tons of unbound population schedules remained to store in perpetuity—with that much weight, in basements.

The available sources provide some glimpses into the condition and disposition of the 1890 single-family schedules during the years leading up to 1921. Until 1903, all census records were in the care of the Patents and Miscellaneous Division of the Interior Department, with the bound 1790 through 1880 volumes still housed in the Patent Office Building. Sometime during the 1900–1901 fiscal year, the 1890 schedules were moved from Marini's Hall to the Union Building on G Street, where some 50,000 "packages" encompassing "12,500,000 sheets," along with various special schedules, occupied nearly 9,600 square feet of floor space that was described as "dry" and "well lighted." Steps were also taken in that year to improve their storage and accessibility. According to a 1901 report, the schedules were "grouped numerically by supervisors and enumerators' districts," then "placed between cardboard covers . . . tied up with twine," and "piled flat in racks"—not much of an advance over what King had managed in 1897, and essentially the manner in which the schedules were to remain stored until the 1921 fire. From the outset, this situation was found to be "unwise," requiring a "great loss of time and labor" to untie and search through the sheets and subjecting them to potential "mutilation or loss."[38] Not surprisingly, in the final two years or so of their custodianship, Interior and Census officials issued pleas to have the schedules bound. But a telling exchange during testimony before House Appropriations Committee chairman Joseph G. Cannon in 1902 reveals the fiscal and intellectual hurdles that archival proposals met in the halls of Congress. On hearing the appalling fact that, among other expenses, $1,800 was being spent annually to rent the storage space for the 1890 census records, Cannon wanted to know "what possible public or private use can these old records be?" E. M. Dawson, the chief clerk of the Interior Department, assured Cannon that his division received inquiries from all over the country about them, and that each record detailed "the history of everybody living who was enumerated during the census year." He read one from 1890 for the congressman: "This is the head of the family, Julia Johnson. She is a widow; her husband was a soldier . . . ; she was born in Maryland; a chambermaid by occupation. . . ." Unmoved, Cannon pressed Dawson on the total cost to destroy all this "antiquated waste paper," by which he seemed to mean *all* census records back to 1790.[39] Confronted with such a political atmosphere, benign neglect was preferable to congressional action.

[38] U.S. Department of the Interior, *Report of the Secretary of the Interior for the Fiscal Year Ended June 30, 1901* (Washington, D.C.: GPO, 1901), 81; Subcommittee of House Committee on Appropriations, *Sundry Civil Appropriation Bill for 1903*, 172.

[39] Subcommittee of House Committee on Appropriations, *Sundry Civil Appropriation Bill for 1903,* 173–74.

In 1903, after the new Census Bureau was transferred from Interior to the Department of Commerce and Labor, all census records followed the bureau to its quarters in the Emery Building near the Capitol. There a fireproof vault was constructed, and, by 1904, according to Census Director S. N. D. North, "all of these valuable records are now stored in it, except the schedules of the census of 1890." An inventory had been taken in 1903, and a clerk noted that the 1890 schedules were in "fairly good condition." North also claimed to have a precise count of the population schedules: 12,690,152. But Claude Halstead Van Tyne and Waldo Gifford Leland reported their continuing segregation outside the protection of the fireproof vault in the 1907 edition of the *Guide to the Archives of the Government of the United States in Washington*.[40] The problem persisted into 1913, when the Census Bureau and all of its records moved to the Commerce Building. Critics protested that the building, unsafe for storing records, was inadequately fireproof. A basement vault was constructed, but had sufficient room for only a limited number of sets. "Except 1890" appears in a 1913 Commerce Department report like a refrain. In the same report, Commerce Secretary William C. Redfield responded to present and future critics (especially in the wake of the disastrous 1911 fire at the New York State Library), going out of his way to include excerpts of a letter that he had sent to the census director: "Referring to your communication as . . . regards the fire risk to valuable records in the building . . . , let me say that your instructions prohibiting smoking are approved. . . . Kindly give consideration to any other precautions that may further provide safety, such as absolute cleanliness in out of the way places, supervision of the night watchmen, provision of fire extinguishing appliances readily accessible. . . ." Yet the archival environment for the records continued to be less than ideal. This was to be expected, given the status of the Census Bureau as a bureaucratic stepchild, squeezed even for office space, much less storage facilities. Kellee Blake cites a 1916 report that the basement storage area lay adjacent to a boiler room; temperatures there could reach ninety degrees, and some deterioration of unspecified records had been noted.[41]

At the time of the fire, the 1790 through 1820 and 1850 through 1870 schedules were on the fifth floor of the Commerce Building—perhaps to make them available to researchers, or perhaps merely because of random available space—while the recent 1920 census was in another building entirely. Occupying the basement vault were the records for 1830–1840, 1880, 1900, and 1910. As had been true earlier, the 1890 records themselves were in a separate, unsecured file

[40] U.S. Department of Commerce and Labor, *Reports of the Department of Commerce and Labor: 1904* (Washington, D.C.: 1905), 310; quoted in Blake, "First in the Path," pt. 1; Claude Halstead Van Tyne and Waldo Gifford Leland, *Guide to the Archives of the Government of the United States in Washington* (Washington, D.C.: Carnegie Institution, 1907), 238–39.

[41] U.S. Department of Commerce, *Annual Report of the Secretary of Commerce: 1913* (Washington, D.C.: GPO, 1913), 94; Blake, "First in the Path," pt. 1.

room, and, as an account of the 1921 fire appearing in the *Washington Post* described it, they were "arranged on pine shelves, with only 20-inch aisles between them." The records within the vault were spared the flames of 10 January 1921, though they suffered significant water damage from the fire hoses. According to Blake, some 8,919 volumes, the majority of them from the 1910 census, had to be dried and/or recopied. Sitting in their unlocked room, the 1890 records bore the brunt of the fire, smoke, and water damage. The chief clerk observed that "a large number of volumes, particularly of the 1890 census . . . are certain to be absolutely ruined."[42]

At the time of the fire, the census director estimated that 25 percent of the 1890 records had been consumed by the flames, while 50 percent of the rest were damaged by water, smoke, and fire. If accurate, these numbers imply that more than a third of the records might be relatively intact. Indeed, *something* more than ashes remained after the fire. During appropriations testimony in 1922, Census Director William M. Steuart said that "two or three thousand cubic feet" of 1890 records were being stored at an "old brewery." An unofficial but apparently reliable source, the *National Genealogical Society Quarterly*, estimated the number of remnants at "41,000 enumeration district records (volumes) surviving," or variously, "2,000 manuscript volumes." In the 1923 annual report of the Census Bureau, a more precise accounting emerges, stating explicitly that

Damaged records in the Commerce Building after the fire of 10 January 1921. ***Photograph from*** **Daughters of the American Revolution Magazine** ***55, no. 3 (March 1921): 148.***

[42] Blake, "First in the Path," pt. 1; "Fire Ruins Records," *Washington Post*, 11 January 1921.

"there are 9,161 bundles of the family schedules used at the census of 1890. These schedules occupy approximately 1,950 linear feet of shelving."[43] It is unclear whether these "bundles" were the original cardboard and twine packages that the Census Bureau had inherited from the Interior Department in 1903. But there seems little doubt, based on this evidence, that a very substantial number of usable or salvageable 1890 records were among the surviving remnants of the 1921 fire.

Certainly members of the public believed so. Slowly but steadily over the years a constituency for past census records had been growing, particularly among the membership of various historic-patriotic and genealogical organizations such as the DAR and the National Genealogical Society (NGS). Soon after the fire occurred, rumors circulated that the damaged schedules might be destroyed, and, in April 1921, these groups mobilized to petition Congress and Commerce Secretary Hoover "in strong protest against the proposed wanton official destruction of invaluable population records." In its resolution, the NGS went further to advocate that Congress appropriate funds for restoration of the 1890 records, a figure that unnamed officials set at $2 million.[44]

Not only the historical but the symbolic importance of the 1890 returns was heightened by their role in the contemporary debate over immigration restriction. "Watch the census tables," Ella Loraine Dorsey urged readers of the *DAR Magazine* in 1924. "They are our safety gauges" to ensure the "moral ascendancy to the American stock." More fundamentally, they were essential to establishing an "authentic link in tracing descent from Revolutionary ancestry, when other proofs were missing." She went on to describe the deplorable conditions in which early census records were currently being stored: "a 'temporary' office building . . . the walls of which are beaver board and the foundations of wood." Alluding to the 1921 fire, Dorsey concluded: "A cast away burning cigarette, a lighted match carelessly flung down—and no human aid could save them from destruction."[45]

Unfortunately, worries over the ascendancy of the American stock could not overcome fiscal conservatism and partisan politics when it came to congressional appropriations for archival management. The storage environment reported by Dorsey was actually an improvement over where the 1890 remnants had been housed in the months following the fire. The "old brewery" that

[43] Blake, "First in the Path," pt. 1; Subcommittee of House Committee on Appropriations, *Departments of Commerce and Labor Appropriation Bill, 1923*, 67th Cong., 2nd sess., 1922, 215; "Save the Population Census of 1890," *National Genealogical Society Quarterly* 9, no. 4 (January 1921): 53–54; U.S. Department of Commerce, *Eleventh Annual Report of the Secretary of Commerce* (Washington, D.C.: GPO, 1923), 91.

[44] "Save the Population Census," 53–54; Lily Lykes Rowe, "Archives Hall Planned by Congress," *Daughters of the American Revolution Magazine* 55, no. 3 (March 1921): 147.

[45] Ella Loraine Dorsey, "The Census and Its Lesson," *Daughters of the American Revolution Magazine* 58, no. 11 (November 1924): 675.

Census Data of 120 Years Ruined by Fire and Water

Irreplaceable Records Stored in Basement of Commerce Building Destroyed—Two Firemen Overcome by Fumes.

Water-soaked and illegible, millions of priceless records of the Census Bureau are under water this morning in what was yesterday a "fireproof" cellar vault, following a fire in the basement of the Department of Commerce Building, Pennsylvania avenue and Nineteenth street northwest, shortly before 6 o'clock last night.

Two firemen—Frank Newman, Truck 3, living at 212a Morgan street northwest, and William G. Parater, Engine 23, whose home is at 317 D street southeast—were overcome in braving the dense smoke and by leaking gas in the cellar. Both responded quickly to treatment at Emergency Hospital.

The blaze was confined to the basement, but clouds of thick smoke found ready drafts through the elevator shafts and stairways of the building, and left its marks in every office. It is believed to have originated in the carpenter shop in the basement of the building. Three alarms and a general local call were turned in.

Census Records in Cellar.

Adjoining the carpenter shop in the cellar is a "vault," 100 by 45 feet, containing the nation's irreplacable census records of the first thirteen censuses, dating from 1790 to 1910.

The 1920 data, with the exception of that dealing with manufactories, mines and quarries, at present on the fourth floor of the building, is still housed in the temporary building at Sixth and B streets southwest.

E. M. Chancellor, an employe working on the fifth floor, shortly after 6:30 o'clock noticed smoke issuing from the elevator shaft. Realizing its significance he turned in the first alarm. Two more alarms in quick succession brought all of the downtown fire-fighters and apparatus to the building.

Smoke Clouds Hamper Firemen.

Twenty streams of water were poured into the building, checking the blaze, but hampering the firemen with dense clouds of smoke. Closely packed files of original census papers sent a smudge rolling out of the windows of the basement and lower five floors. A laboratory on the first floor directly over the seat of the blaze, in which are adjusted and repaired the delicate enumerating and card-punching devices of the latest census-taking system, escaped damage.

A combination of escaping gas and smoke fumes forced the firemen to seek relief in the open air. Frank Newman, who remained in the vault until he had to be carried out, has already shown his grit in his chosen profession. He was recently awarded a medal, being named by the three District Commissioners as the bravest fireman on the force. One of Newman's recent feats was bringing to safety Madame DeGuzman, widow of the former Minister of Nicaragua, who was trapped in the Hotel Everett blaze.

***Washington Herald* and other newspapers reported the events of 10 January 1921. General Correspondence 68636/3, Office of the Secretary, General Records of the Department of Commerce, Record Group 40, National Archives, Washington, D.C.**

Census Director Steuart mentioned in his 1922 testimony was in fact the "stable of the old Heurich brewery," considered to be fireproof. The 1890 records were "just piled down there in a solid mass," according to Steuart. "This is a very bad place to store them and they are deteriorating rapidly." He fanned the rumors that had alarmed genealogical groups when he suggested that it would be better to destroy the remnants promptly rather than pay rent to degrade the records into something "absolutely useless." After this bleak assessment, a member of the appropriations committee had asked reasonably, "You have a copy of them, have you not?" Steuart replied, "No, sir; no copy of them."[46]

Steuart thereafter had the records moved to the Census Building, which was as Dorsey described it, only worse. As Steuart noted, the "only fire protection is an automatic sprinkling system, which if put into action would be about as destructive to the records as fire would be."[47] In his 1927 and 1928 annual reports, he issued identical pleas to save them:

> [S]everal years ago a fire . . . destroyed or damaged about three-fourths of these schedules. Many of the schedules can be placed in suitable condition for reference, but no appropriation has been made for their reconstruction and repair. Numerous requests are now received for information contained in these schedules, and as time elapses the demand for such information will be increased. I therefore renew the recommendation that authority be given for the repair of these schedules. . . . Unless such provision is made, the schedules will very shortly be in such shape that they can not be repaired. In the meantime they are being stored in a building that is not fireproof, and therefore are liable to further mutilation and possible destruction.[48]

After these words, at least in public, came official silence.

The denouement of the 1890 population census began in late 1932, when, in accordance with the "useless paper" law of 1889 (as amended in 1912), the schedules were inexplicably added to a list of records to be destroyed pending the approval of the Librarian of Congress. No one ever explained why the schedules were added to the list; the process appears to have been ad hoc—each department defined what was "useless." Approval was given, and Congress added its authorization on 21 February 1933. As Kellee Blake notes, one day earlier, President Hoover laid the cornerstone of the National Archives Building. It is possible that the enormous distraction of the worst period of the Great Depression played a role, not to mention the departure of the Hoover administration and the much anticipated arrival of the New Deal administration less than

[46] Subcommittee of House Committee on Appropriations, *Departments of Commerce and Labor Appropriation Bill, 1923*, 57, 215.

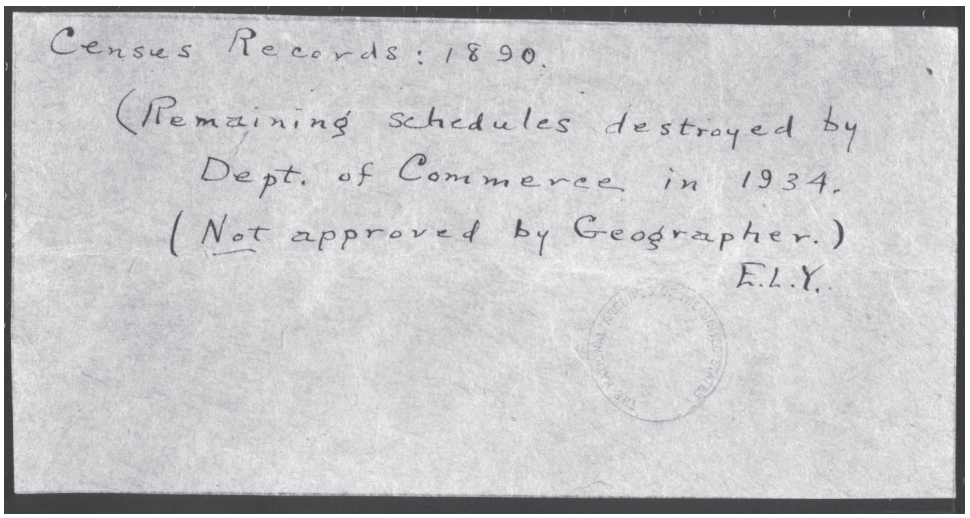
[47] U.S. Department of Commerce, *Thirteenth Annual Report of the Secretary of Commerce* (Washington, D.C.: GPO, 1925), 84.

[48] Department of Commerce, *Thirteenth Annual Report,* 83; U.S. Department of Commerce, *Fifteenth Annual Report of the Secretary of Commerce* (Washington, D.C.: GPO, 1927), 67.

a month later—Congress and everyone else involved may simply have missed the significance of what they were doing. The condition of the schedules at this late date, after years of questionable storage, may have made the decision an easy one. Whatever the case, almost all of the remnants were destroyed sometime in 1934 or 1935.

A possible reprieve may have fallen into a legal void between the date of their disposal authorization and the appointment of the first Archivist of the United States on 10 October 1934. According to the first annual report of the National Archives, the chair of the House Committee on the Disposition of Executive Papers, a key part of the disposal regime being superseded, "requested the Archivist to examine and make recommendations as to the disposition of papers that had been recommended to Congress for destruction prior to the appointment of an Archivist." A panel of four examiners was organized to review the useless paper reports and give their approval, which was "concurred in by the Archivist."[49] Whether the decision by the Commerce Department to destroy the 1890 schedules ever came under this review is not known. The documentation of their disposal is quite spotty.

A greater irony was yet to come. The Census Bureau's 1934 annual report mentions a Civil Works Administration project under which the census records for 1800 to 1820 were "photostated and bound." Over the next several years, beginning within a year or so after the 1890 schedules were destroyed, a



Note, n.d., signed E.L.Y., folder "Census of 1890," box 9, Alphabetical Subject File, entry 160, Records of the Bureau of the Census, Record Group 29, National Archives, Washington, D.C.

[49] Blake, "First in the Path," pt. 1; National Archives of the United States, *First Annual Report of the Archivist of the United States for the Fiscal Year Ending June 30, 1935* (Washington, D.C.: GPO, 1936), 1, 27.

program was undertaken to microfilm all of the census schedules for 1840 to 1880 and retire the originals.[50] The remnant 1890 schedules might also have been prime candidates for transfer to another medium, ensuring long-term preservation, but it seems they no longer existed.

Legacies: Sparking the National Archives?

Although the role of the 1921 census fire is often connected, implicitly and explicitly, to the creation of the National Archives, there is reason to doubt any direct cause and effect. The 1921 fire was among the more spectacular in a long series of such disasters. For example, significant fires destroyed or threatened federal records in 1800, 1801, 1814, 1833, 1836, 1877, 1880, and 1881. According to a report by the District of Columbia fire marshal, as many as 250 major and minor fires occurred in federal buildings between 1873 and 1915.[51] Yet none of these events had been sufficient to oblige Congress to create a national archives, even in the latter years when J. Franklin Jameson and others specifically lobbied for such an institution. No less than forty-two archives bills had been introduced in Congress between 1881 and 1912, with little result.[52] In 1913, an archives building was first authorized—with no funding.

If one is looking for a definite disaster to which to ascribe the birth of the National Archives, the devastating 1911 fire that almost completely destroyed the New York State Library might be a better candidate. Jameson, the chief lobbyist, called this event the worst catastrophe that had "ever befallen American historical material." Lost were 450,000 books and 270,000 manuscripts, including much of the documentary heritage of the Dutch colonial period in New York. As the *American Historical Review* remarked soon afterward, "the Albany disaster has aroused in official circles in Washington fresh interest in the problem of a safe and proper housing of the government archives." Jameson mentioned the library fire in a letter that at last won support from President Taft; he signed the authorization bill for the archives building as the final act of his administration in 1913.[53]

[50] U.S. Department of Commerce, *Twenty-Second Annual Report of the Secretary of Commerce* (Washington, D.C.: GPO, 1934), 23; Greenwood, *Researcher's Guide*, 264.

[51] On past fires, see Leonard D. White, *The Jacksonians: A Study in Administrative History, 1829–1861* (New York: MacMillan, 1954), 545–46; James Gregory Bradsher, "A Brief History of the Growth of Federal Government Records, Archives, and Information, 1789–1985," *Government Publications Review* 13 (July/August 1986): 492; National Archives of the United States, *First Annual Report*, 2–3.

[52] National Archives of the United States, *First Annual Report*, 3.

[53] Quoted in Cecil R. Roseberry, *For the Government and People of This State: A History of the New York State Library* (Albany: University of the State of New York, 1970), 88; "America: General Items," *American Historical Review* 16, no. 4 (July 1911): 880; see Gondos, *J. Franklin Jameson*, 56–62.

Nevertheless, an authorization was not an archives, and Jameson had to continue his lobbying efforts, especially after World War I diverted attention from it as a legislative priority. Needless to say, he seized upon the 1921 fire to press his issue. It is true that in the immediate aftermath of the census fire, there was a short-lived hue and cry in the media, and the Senate appropriations committee passed funds to buy land for an archives building. But as Victor Gondos points out, the House shortly killed that effort.[54]

Just over a year after the incident at the Commerce Building, another fire threatened records in the Treasury Department, and again a temporary storm was set off in the newspapers, usually in the form of a long litany of past and recent disasters. In 1923, the *Washington Herald* published a sensationalized series on the poor storage conditions of federal records, including Congress's own piles and bundles stashed in the attic of the Capitol. So, even as favorable publicity or object lesson showing a compelling national need, the 1921 fire was quickly supplanted.

After so many years of thwarted proposals, two larger historical developments transformed the political context and enabled a national archives. First, a long-gestating great public buildings program for all of the departments of government was launched in 1919 and culminated with the Public Buildings Act of 1926, of which authorization for an archives building was merely one element. And second, the First World War itself greatly exacerbated the problem of housing federal records, by one estimate doubling the volume of all records created up to 1917. As a *DAR Magazine* article chronicling the need for an archives acknowledged, "[T]he most acute stimulus to the movement has been the recent World War." Yet year after year during the 1920s, the House and Senate still failed to come to terms over the funding and siting of an archives. Not until the involvement of patriotic organizations at the grassroots level and President Coolidge at the highest level was a specific appropriation finally passed in 1926 in the wake of the Public Buildings Act.[55] Several more years elapsed before ground was ultimately broken—as it happened, fatal years of delay for saving anything of the 1890 census.

The legacy of the destruction of the 1890 census for archival practice was perhaps more modest, but also, more enduring. Rather than spurring the creation of a great national archival institution, it appears to have encouraged the Census Bureau to improve its own records management. With some fanfare in 1930, the bureau publicized its construction of the largest fireproof vault to contain the schedules of the 1930 census and reported that earlier censuses were

[54] "An Archives Building," *Washington Post*, 6 February 1921; see also Gondos, *J. Franklin Jameson*, 94–101.

[55] National Archives of the United States, *First Annual Report*, 2–3; Frederick Haynes Newell, ed., *Planning and Building the City of Washington* (Washington, D.C.: Ransdell, 1932), 57–59; Gondos, *J. Franklin Jameson*, 88, 110, 155–56; Rowe, "Archives Hall Planned by Congress," 140.

kept on steel shelving within cement buildings.[56] Beyond these short-term consequences, each time a budding genealogist has asked for it and has to be told why it isn't there, the 1890 census has reminded American archivists over the decades of what can happen without fireproofing or disaster planning.

Legacies: The Work-Around

Most writers on the loss of the 1890 census echo the assessment of T. J. Fitzgerald, chief clerk of the bureau, who said on the evening of the fire, "The records are priceless. . . . They cannot be replaced."[57] But just how catastrophic was the loss of the schedules? Was it really beyond amelioration?

A case study in the evidential void left by the destruction of the 1890 census is historian Stephen Thernstrom's classic 1973 book, *The Other Bostonians: Poverty and Progress in the American Metropolis, 1880–1970.* In this work, Thernstrom attempts to measure social and geographical mobility using a set of samples of individual heads of household over time. One aspect of the study involved "an effort to trace in the *1890 city directory* the adult members of a sample of Boston males drawn from the 1880 U.S. census" [italics added]. Another dimension of the analysis required Thernstrom to use the 1885 and 1895 Massachusetts state censuses to try to calculate length of residency from 1880 to 1890. His results were spread uncertainly across a range from 32 and "probably more like 35 to 40 percent," though finally he settled on "about a third" as his estimate, because "a more precise figure cannot be obtained." In an appendix, Thernstrom pays homage to "the richest source of historical population data available to American researchers, the manuscript schedules of the United States Census," but he adds that their unavailability due to time limits or fire "makes the systematic study of recent American social history considerably more difficult than would otherwise be the case." For, in Thernstrom's opinion, "The alternative sources that can be used for a study of this kind are neither as comprehensive in coverage nor as rich in detail."[58]

The alternative sources that researchers may utilize to work around the 1890 gap, as Thernstrom did, include some pieces of the 1890 census itself. Thernstrom himself used the published statistical compilations derived from the schedules long before the fire.[59] And, as noted, a considerable portion of the

[56] "New Fireproof Vault for 1930 Census Facts," *New York Times*, 30 March 1930.

[57] "Fire Ruins Records," *Washington Post*, 11 January 1921.

[58] Stephen Thernstrom, *The Other Bostonians: Poverty and Progress in the American Metropolis, 1880–1970* (Cambridge, Mass.: Harvard University Press, 1973), 19, 20, 265–66.

[59] Available to this day at http://www.census.gov/prod/www/abs/decennial/1890.htm, accessed on 23 December 2007.

1890 Civil War veterans schedules survived because they had been put in the care of the Pension Bureau. A few other small special enumerations, such as for Oklahoma Territory and various Indian tribes, were also in the custody of other entities and remain available today. Moreover, several fragments of the general population schedules turned up during the 1940s and 1950s, having somehow escaped disposal, and were duly microfilmed. Although amounting to only 6,160 names spread across various states (out of sixty-two million enumerated), these discoveries raise further questions about the wisdom of the 1933 disposal authorization.

Aside from these fragments, researchers must look to city directories as well as state censuses, which were generally taken at mid-decade. Tax rolls are also commonly used as census substitutes. Until recently, one drawback to these various alternatives was their wide dispersal, making them difficult to access outside of their locality. But in 2000, Ancestry.com collaborated with the Allen County (Indiana) Public Library and the National Archives to develop an online 1890 census substitute. This substitute includes not only these alternative sources, but also tribal censuses, alumni directories, and voter registration records. Pooled together and indexed, these sources amount to over twenty million names. While still not on the scale of the original, the Ancestry substitute is touted as considerably bridging the void left by the missing 1890 census. "What has heretofore been considered a dark period in genealogical research has now been given new light," writes Curt Witcher. "What was once difficult and uncharted territory . . . is now a leap into the great frontier of Internet genealogy," declares Suzanne Russo.[60]

Or is it? Certainly, in research, something is always better than nothing, yet Thernstrom's issues with the alternative sources remain well taken. Samplings in 1885 and 1895 do not somehow average out to 1890, especially in a period of great population mobility. One or two recorded queries are not the equivalent of thirty queries, which were standard on the 1890 schedule. Many city directories list only name and street address. Mid-decade state censuses were not uniformly implemented. Tax rolls are not always available and can be difficult to search, which is true of the online substitute as a whole. Researchers are asked to search across an aggregation of many different formats of records, as opposed to the single format of the long-lost 1890 census, rich in information. While the online substitute will no doubt "shed light" on the last ten to fifteen years of the nineteenth century and greatly ease the "work-around," there ultimately can be no replacement for the detailed snapshot of the American populace captured on those ill-considered forms that were the curse and the treasure of the 1890 census.

[60] Kathleen W. Hinckley, *Your Guide to the Federal Census for Genealogists, Researchers, and Family Historians* (Cincinnati: Betterway Books, 2002), 56; Witcher, "Blazing New Trails"; Russo, "On the Frontier."

Conclusion

Census population schedules are valuable when measured by any of several of the appraisal criteria defined by archival theory. They emanate from the state and represent an important governmental activity. Scholars seek after them. By their very nature, they reveal important facts about the social development and processes of previous eras. And they enjoy widespread interest from the public-at-large. The first, second, and fourth of these criteria were certainly present among recordkeepers and users during the lifetime of the 1890 federal census, yet all of these assertions of value were insufficient to prevent its loss.[61] While it may be true, as Jay Atherton has written, that "records are not created to serve the interests of some future archivist or historian," but "to serve immediate operational needs," the creators of the 1890 census are not so easily excused. Herman Hollerith once wrote that he had invented his tabulating system "for the specific purpose of cheapening and simplifying Census work," and this goal guided many of the decisions that the creators made.[62] From the perspective of "immediate operational needs," Hollerith's machines—so emblematic of the scientific ethos that had come to reside in the Census Office—were a success, generating the most complex and detailed statistical profile of the nation up to that time, over 26,000 pages in all. Moreover, they appear even to have achieved the elusive goal of "economy," allowing the Census Office to complete its statistical work in two to three years. A later estimate calculated that the Hollerith system saved the government the equivalent (in 1990 dollars) of $1 billion.[63] But the evidence also suggests that the Hollerith machines contributed to the official carelessness underlying the no-copy policy and the single-family schedule, exploding the volume of returns. Such economizing, reflected also in the desire to reduce the number of clerks and enumerators, may have been part of the Census Office's operational needs, but so also were the "care and preservation of the records of the Eleventh and previous censuses," as directed—belatedly—by Congress.[64]

The creators of the single-family schedule knew full well that they were creating records not only for "immediate operational needs," but also for posterity. Previous censuses were already part of an archival regime, minimal

[61] On archival theory and appraisal, see Terry Cook, "What Is Past Is Prologue: A History of Archival Ideas Since 1898, and the Future Paradigm Shift," *Archivaria* 43 (Spring 1997): 17–63; Hans Booms, "Society and the Formation of a Documentary Heritage: Issues in the Appraisal of Archival Sources," *Archivaria* 24 (Summer 1987): 69–107.

[62] Jay Atherton, "From Life Cycle to Continuum: Some Thoughts on the Records Management-Archives Relationship," *Archivaria* 21 (Winter 1985–86): 49; Herman Hollerith to Theodore Roosevelt, 9 January 1909, Herman Hollerith Papers, Library of Congress Manuscript Division.

[63] U.S. Census Bureau, *100 Years of Data Processing: The Punchcard Century* (Washington, D.C.: U.S. Department of Commerce, 1991), 5–6.

[64] U.S. Congress, *Statutes of the United States of America, Passed at the Second Session of the Fifty-Fourth Congress, 1896–1897* (Washington, D.C.: GPO, 1897), 567.

though it may have been. Their schedules had been bound, and attempts were made to secure them from theft and fire. Commissioner Carroll Wright admitted in 1896 that he and others were charged with the "proper preparation of the census schedules for preservation," but they were mesmerized by the $30,000 in savings to be gained in declining to bind them.[65] It is telling that the secretary of the interior and various appropriations committee members were also involved in this decision. Throughout the story of the 1890 census, such politicians tended to view the costs of archival preservation (even of the most rudimentary kind) as a wild extravagance. Yet simply binding the 1890 schedules might have prevented the storage segregation that made them so vulnerable to fire. The fate of the 1890 census emerges as a cautionary tale of the true costs of short-term economizing in recordkeeping. It indicates as well what a sea change in attitudes was necessary within Washington's political and bureaucratic cultures for a full national archival regime to begin to take hold by the 1940s. As a cautionary tale, the 1921 fire and destruction of the 1890 census have helped to impel that sea change, which remains ongoing.

The irony of the sacrifice of the 1890 population schedules to short-term "operational needs" and savings rests ultimately on the fact that those schedules arguably became more valuable than the national statistical profile for which they supplied the raw data. In a 1978 article on appraising machine-readable records, Charles M. Dollar observed that "census information at the household level is more valuable than a summary at the enumeration district level" or at the "county level," because "while you can never disaggregate summarized data (down from group data to individual data), you can always aggregate micro-level data to the desired summary level."[66] From an information-processing standpoint, the punched cards of the 1890 census were always an incomplete transcription of the data on the schedules; information—the names of individuals at particular locations—was left on the sheets, there eventually to perish. In their single-minded quest for the summary level, the records creators and statisticians neglected the microlevel, which on cards or sheets might have been reprocessed by later scholars like Stephen Thernstrom, who would ask different questions of the data. Few today care what the population of the United States was in 1890, which was of supreme importance to the records creators. But many now would like to know whether their great-grandparents had arrived in America by 1890, or where they were residing, or the names of their children, none of which is to be found in the 26,000 pages of summary statistics that the records creators saw as their signal achievement. They were at once too scientific and not scientific enough. They recognized the power of information processing to produce

[65] U.S. Census Division, *Report of the Commissioner of Labor. . . for the Fiscal Year Ending June 30, 1896* , 3–4.

[66] Charles M. Dollar, "Appraising Machine-Readable Records," in *A Modern Archives Reader*, 73.

statistics, but they failed to process all of the information that had been so painstakingly gathered. There was to be no machine-readable copy of the ill-fated population schedules, no copy at all, and today, because of the chain of short-sightedness, carelessness, questionable decision making, and bad luck that led to 1921, we are no longer able to access this information, which captured a moment in the individual lives of sixty-two million Americans during the year 1890.