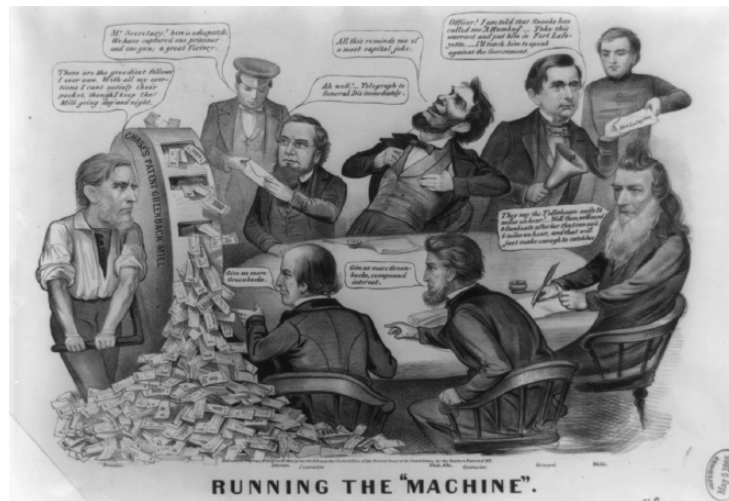


Lincoln's Greenback Mill: Civil War Financing and the Start of the Bureau of Engraving and Printing, 1861–1863*

Franklin Noll

The Civil War is seen by some as a watershed in which the political culture of the United States shifted from one extolling a decentralized, limited government with a laissez-faire approach to public affairs to one based on a centralized, expansive government intervening in the public realm.¹ The emergence of the Bureau of Engraving and Printing (BEP) appears to be a perfect example of this change in attitudes. In only three years, 1861–1863, the U.S. Treasury went from a decades-old policy of engaging private printers (bank note companies) to operation of a Government monopoly that controlled all such activity inside the confines of the Treasury. This analysis presumes a certain premeditation on the part of the government, involving cool deliberation and an astute reading of the political winds.



"Running the 'Machine'": An 1864 cartoon of President Lincoln and his Cabinet watching then-Secretary of the Treasury William Fessenden operating "Chase's Patent Greenback Mill."

However, a closer look at the creation of the Bureau of Engraving and Printing reveals a far different story—one of panic, chaos, and rapid adaptation. Faced with a breakdown of its war financing scheme because of the failure of bank note companies to produce the needed currency and bonds, the Treasury Department was forced on an ad hoc basis to enter the printing business to meet its needs. Through improvisation and invention, an establishment was set up inside the Treasury Building that produced the needed financial instruments to pay for the war and that eventually grew into the Bureau of Engraving and Printing. Almost unintentionally, the government established a monopoly on the production of government currency and securities, turning a wartime expedient into an institution.

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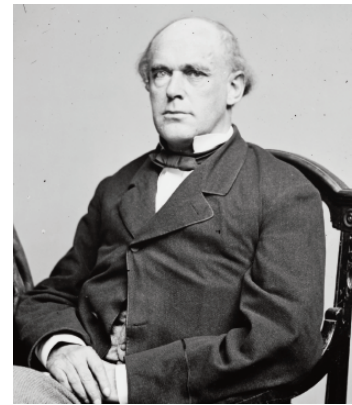
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¹ Richard Franklin Bense, *Yankee Leviathan: The Origins of Central State Authority in America, 1859–1877* (New York: Cambridge University Press, 1991); Robert Higgs, *Crisis and Leviathan: Critical Episodes in the Growth of American Government* (New York: Oxford University Press, 1989).

Early Wartime Financing

Approximately one month after the Union defeat at First Manassas, or Bull Run, Secretary of the Treasury Salmon P. Chase negotiated a loan from the big northeastern banks. In the middle of August 1861, after a week of cajoling and veiled threats, Chase got the bankers to agree to a “plan for assisting the United States government.”² It was a \$150 million loan (in three installments of \$50 million in gold) given in exchange for the like amount in three-year Treasury notes paying 7.30 percent (also known as “Seven-Thirties”) that they could later sell to clients above par or face value.³ Until the first \$50 million in gold arrived in the Treasury, Chase planned to issue \$50 million in Demand Notes, a currency payable upon demand in gold at any Treasury office.⁴ Issuing Treasury notes and Demand Notes sounds simple until one considers what was actually involved in producing and processing the millions of pieces of paper needed to fulfill these plans.

Before the Civil War, the Treasury followed a time-consuming procedure for issuing financial instruments. First, it contracted with one of the New York bank note companies to produce the approximately 25,000 or so securities it needed for its average annual issue before the war of \$10 million.⁵ Finished, printed securities would begin arriving in Washington after about a month, with the total printing job taking approximately six to eight weeks to complete. The securities were printed from one to four per sheet, and upon reaching the Treasury, the sheets were bound in a book. Then, whenever a security was sold, a clerk in the Register’s office would perform the proper record keeping and, taking a pair of scissors, cut the security out of the book. The security would then pass to the Register for his signature. Next, it went to the Treasurer’s office. There, more record keeping would occur, and the Treasurer would sign the security. The duly signed security would then pass to the Secretary’s office, which might record further information and pass it along to the sealing room. A clerk would emboss the Treasury seal on the security, marking its authenticity. The security was then ready for issue.



Secretary of the Treasury Salmon P. Chase, 1861–1864.

Chase’s Seven-Thirties were issued by this method, but the roughly 210,000 securities required put a strain on Treasury personnel.⁶ It helped that they were being sold *en bloc*, eliminating the need to record all that individual ownership information, and that the authorizing legislation

² Wesley C. Mitchell, *A History of the Greenbacks* (Chicago: University of Chicago Press, 1903), 23.

³ Bray Hammond, *Sovereignty and an Empty Purse: Banks and Politics in the Civil War* (Princeton: Princeton University Press, 1970), 73–87; *Annual Report of the Secretary of the Treasury on the State of the Finances, 1861* (Washington, DC: Government Printing Office, 1861), 9. Hereinafter cited as *Annual Report*.

⁴ Demand Notes were authorized by the act of July 17, 1861. The particulars of Demand Notes are discussed in Michael Scalia, “Demand Notes: The Accidental Currency,” *Historical Resource Center Occasional Papers* (Washington, DC: Bureau of Engraving and Printing, 2006).

⁵ Production figures were calculated using the quarterly dollar amounts issued and production for the period of July 4, 1862, to October 1, 1864. Dollar amounts issued were taken from Rafael A. Bayley, “The National Loans of the United States from July 4, 1776, to June 30, 1880,” 2d ed., facs. rpt. (New York: Burt Franklin, 1970 [1881]), 180–83, and quarterly production figures from Franklin Noll, “The Production of Treasury Securities, July 4, 1862 to October 1, 1864: The Reconstruction of BEP Quarterly Production Figures,” October 1, 2004, manuscript.

⁶ Gene Hessler, *An Illustrated History of U.S. Loans, 1775–1898* (Port Clinton, OH: BNR Press, 1988), 215–19.

for the issue allowed the Treasury to skip the step of applying the seal. Luckily, the embossing of the Treasury seal was also eliminated in the case of the Demand Notes, as an issue of \$50 million was equivalent to over 4.3 million pieces of currency.⁷

By the end of August 1861, sheets of Demand Notes were arriving in Washington from the New York printer. The currency was delivered in uncut sheets containing four notes. However, since no records of ownership had to be kept, these sheets were not bound in books. At first, traditional methods of processing Treasury securities were followed with each note cut from a sheet by hand by clerks with scissors and signed by Treasury officials using pen and ink. But as the enormity of the job ahead began to dawn upon the denizens of the Treasury, officials quickly decided that clerks could be authorized to sign notes in place of Treasury officers. Soon there were as many as 70 clerks signing notes, with each expected to sign 3,000 notes a day, and more women hired to cut and trim the notes.⁸ Throughout the autumn and winter of 1861, the clerks worked feverishly, waiting for the Union victory.

By early 1862, it was clear to all that the war was going to prove longer and costlier than first anticipated. With the Treasury facing bankruptcy, and the bankers apparently unwilling to help because of the Government's poor credit rating,⁹ Congress authorized an additional, emergency issue of \$10 million in Demand Notes and the issue of \$150 million in a new fiat currency soon known as the "Greenback."¹⁰ How were the clerks in the Treasury supposed to accomplish all of this work? Already struggling to process the over 4 million Demand Notes, they now had an extra 400,000–500,000 more to deal with plus a towering mountain of Greenbacks—an added 25.5 million pieces of currency.¹¹



A \$5 Demand Note, 1861.

⁷ Demand Notes were issued in \$5, \$10, and \$20 denominations. As the exact distribution of how these were printed is unknown, it was assumed that an equal number of each denomination was printed. The average value of a set of \$5, \$10, and \$20 notes was then divided from the total dollar issue to get the total number of notes printed.

⁸ Scalia, "Demand Notes," 5.

⁹ Heather Cox Richardson, *The Greatest Nation of the Earth: Republican Economic Policies during the Civil War* (Cambridge, MA: Harvard University Press, 1997), 46–47; Fritz Redlich, *The Molding of American Banking: Men and Ideas, Part II: 1840–1910* (New York: Hafner Publishing Co., 1951), 85–95.

¹⁰ The Demand Note increase was authorized by the act of February 12, 1862, while the Greenback issuance was made possible by the act of February 25, 1862. Mitchell, 47; Bayley, 153, 156.

¹¹ The number of Greenbacks needed to be produced was derived from cumulative production figures reported in 1864. "Report to the Secretary of the Treasury from the First Division of the National Currency Bureau," House Ex. Doc. No. 50, 38th Cong., 2nd sess., Feb. 6, 1865, 58–59. Hereinafter cited as National Currency Bureau report.

The legislation of February 25, 1862, that authorized the Greenbacks recognized some of those problems. The Treasury was allowed to have the signatures printed on the currency notes,¹² eliminating the need for a new army of clerks to do all the signing. Instead of embossing the Treasury seal on each note, Congress directed the Treasury to print the seals on the notes. For the first time, printing presses were brought inside the Treasury. As a result, the mechanics of Treasury security issuance were changing.

Directing the change was Spencer Clark, at that time Acting Engineer in Charge of the Bureau of Construction.¹³ He oversaw the printing of Treasury seals onto the Greenbacks. By March 1862, Clark had already overcome the currency processing bottleneck of the cutting of notes from their sheets. He mechanized the process with a hand-powered machine that cut and separated the Demand Notes.¹⁴ In August he began development of a steam-powered machine for processing the Greenbacks that was successfully running a month later.¹⁵ By the end of 1862, the Treasury had mechanized the processing of printed sheets of securities. All that remained to create a full-fledged Treasury-run bank note company was the in-house printing of securities. This step came a few months later when problems arose with the Five-Twenty bonds.¹⁶

The Greenbacks were in part intended to be a stopgap measure to sustain the Treasury until the newly authorized Treasury bonds, the Five-Twenties, could begin generating revenue. To make up a massive shortfall in needed borrowing during fiscal year 1863, the Treasury planned to sell \$500 million in Five-Twenty bonds. Sales were initially flat as banks refused to deal in the bonds. As Greenbacks were exchangeable for the bonds at the pleasure of the holder, the price of new Five-Twenties was effectively locked at par or face value, eliminating any chance of large-scale speculative purchases in the secondary bond market.¹⁷ Sales picked up after October 1862 when Chase employed financier Jay Cooke as an agent for the Treasury.¹⁸ Using direct sales techniques and heavy advertising of the profitability of owning bonds, Cooke expected to sell at least one million dollars' worth of bonds a day by bypassing the banks and going straight to the general public.¹⁹ And, in the spring of 1863, sales of Five-Twenties finally began to accelerate as Cooke's efforts began to bear fruit. Between the end of March and the end of June, quarterly sales skyrocketed from \$7.2 million to \$156.5 million.²⁰ The consequence was that there would be a major increase in the number of bonds that needed to be issued.

Unlike currency, there were no major difficulties in processing the sheets of securities. The Five-Twenties were almost all printed singly (one to a sheet) and did not need a seal applied. All that

¹² Michael Scalia, "Origins of the Bureau of Engraving and Printing," *Historical Resource Center Occasional Papers* (Washington, DC: Bureau of Engraving and Printing, 2006), 6.

¹³ The position would later be known as Supervising Architect of the Treasury.

¹⁴ Scalia, "Origins," 9.

¹⁵ *Ibid.*, 8, 10–11.

¹⁶ So called because the bonds were redeemable by the government in 5 years and reached maturity in 20. They paid 6% interest.

¹⁷ Davis Rich Dewey, *Financial History of the United States*, 8th rev. ed., facs. rpt. (Boston: Elibron Classics, 2003), 2: 307.

¹⁸ Salmon Chase to Jay Cooke, Oct. 23, 1862. John Niven, ed., *The Salmon P. Chase Papers, Vol. 3: Correspondence, 1858–March 1863* (Kent, OH, and London: Kent State University Press, 1996), 299–300; Henrietta M. Larson, *Jay Cooke, Private Banker* (Cambridge: Harvard University Press, 1936), 118.

¹⁹ Larson, 120.

²⁰ Bayley, 156.

was needed was for a clerk to perform some minimal bookkeeping and pass it on to the Register's office for an official signature; thousands could be processed in a day. Basically, the bonds could be processed as fast as they were sold. The problem in the issuance of the Five-Twenties was production—getting enough securities printed to meet sales.

From the start, the printing of Five-Twenties lagged well behind demand. Aiming to sell an unprecedented number of securities, the Treasury contracted with the two largest bank note companies in the country—the American Bank Note Company and the National Bank Note Company—to produce the needed 1.25 million Five-Twenty bonds.²¹ To meet these levels of production, the bank note companies would need to dedicate about 17 to 26 pressmen working 8–12 hours a day, 6 days a week, to the printing of Five-Twenties.²² The bank note companies were unwilling to do this, and within weeks after the start of printing, Secretary Chase was reduced to begging and threatening the companies for greater production.²³ Matters only worsened as Cooke worked to increase sales.

The Government, and thereby Cooke, promised delivery of bonds within four days of purchase, but by the winter of 1862 it was taking the Treasury about 30 days to deliver a purchased bond to the buyer.²⁴ As the Treasury's representatives, Cooke and his agents took the brunt of the abuse from angry investors who demanded their money back, leaving Cooke with unsold bonds. In turn, Cooke brought pressure to bear on Chase through his brother Henry, a confidant of Chase. In March 1863, Henry Cooke reported to his brother, "I have done all I could, and so has . . . Chase, to hurry up the printing and forwarding of the bonds. . . . I have shown him how the delay in deliveries checks sales as shown by the falling off in today's orders."²⁵

By April, sales of Five-Twenties were reaching \$2.5 million a day.²⁶ Cooke kept up the pressure on Chase to increase the speed of bond deliveries. At one point during the month, Cooke had \$8 million in bond orders awaiting delivery by the Treasury.²⁷ The growing backlog endangered government credit and the success of the loan.²⁸ Cooke's agents working on commission were dismayed at the continuing delays. He reported that at a May 28 meeting with his New York

²¹ This figure was based on Clark's estimate of 250,000 securities per \$100 million Five-Twenties or a total of 1.25 million for the \$500 million to be issued. Spencer Clark to Henry Keeney, June 12, 1863. Entry 5: Press Copies of Official and Miscellaneous Letters Sent, vol. 2, Records of the Bureau of Engraving and Printing, Record Group (RG) 318, National Archives at College Park, MD. The latter hereinafter cited as NACP.

²² The calculations behind these figures can be found in Franklin Noll, "The Beginning of Treasury Security Production at the Bureau of Engraving and Printing, 1863," *Historical Resource Center Occasional Papers* (Washington, DC: Bureau of Engraving and Printing, 2006), 6n13, 8n15.

²³ Tracy Edson to Salmon Chase, Apr. 16, 1862. Folder 1861–1862, Box 2: American Bank Note, Entry 542: Correspondence with bank note companies, Records of the Bureau of the Public Debt, RG 53, NACP. Also see Tracy Edson to Salmon Chase, Aug. 12, 1862. *Idem*.

²⁴ Letter from Henry Cooke to Jay Cooke quoted in Ellis Paxson Oberholtzer, *Jay Cooke: Financier of the Civil War*, Vol. 1 (Philadelphia: George W. Jacobs & Co., 1907), 1: 229.

²⁵ Letter from Henry Cooke to Jay Cooke quoted in *Ibid.*, 1: 230.

²⁶ Larson, 144.

²⁷ Oberholtzer, 1: 231.

²⁸ Larson, 144.

agents, “all the agents [are] disposed to back out & quit the business—the delay of Bonds is ruinous & they say it is getting to be intolerable. It takes all their time to manufacture excuses.”²⁹

The Treasury Begins Printing

With the big two bank note companies unable to meet current demands, Chase sought to involve more printers in production of the bonds. But to do this, Chase needed the engraved plates used in printing the securities. And since, technically, the plates used to print Government securities were the property of the government, Chase sought to claim possession of them. Both the American Bank Note and National Bank Note companies refused to give up the plates, calling Chase’s proposal surprising, radical, and downright underhanded.³⁰ Possession of the plates, the bank note companies argued, ensured future business, and this prospective profit was factored into the cost of the printing run.³¹ Given this rebuff, Chase tried the alternative of contracting with the newly formed Continental Bank Note Company to produce some of the bonds, increasing overall production. However, the older companies refused to promote the business of this newcomer, wanting to maintain the status quo.



The South entrance of the Treasury Building during the Civil War.

Trying to conduct business as usual on the bank note companies’ terms had failed, and it was threatening to wreck the Treasury’s plan for financing the war. Desperate, Secretary Chase turned to Clark to undertake the printing of the Five-Twenties inside the Treasury and to acquire all new plates from private engravers. It was not until the middle of July 1863 that the plates were ready and Clark began to produce finished Five-Twenty bonds. Using over 40 printers, and producing more than 2,500 bonds a day,³² it took Clark until February 1864 to overcome the massive backlog in unfilled orders created by the bank note companies.³³ The Treasury was now printing and processing its own securities and currency (Fractional Currency at this point), and the Bureau of Engraving and Printing in everything but name was established.³⁴



Spencer Clark, founder of the Bureau of Engraving and Printing.

³⁰ National Currency Bureau report, 29–31; Fitch Shepard to Salmon Chase, May 23, 1863, Folder 1863–1864, Box 3: National Bank Note, Entry 542: Correspondence with bank note companies, Records of the Bureau of the Public Debt, RG 53, NACP.

³¹ Report of the Joint Select Committee on Retrenchment, Senate Report No. 273, 40th Cong., 3rd sess., Mar. 3, 1869, 186, 207.

³² Spencer Clark to Salmon Chase, Nov. 28, 1863, Entry 5: Press Copies of Official and Miscellaneous Letters Sent, vol. 2, Records of the Bureau of Engraving and Printing, RG 318, NACP.

³³ Spencer Clark to Salmon Chase, Feb. 4, 1864, Folder 1, Box 1, Entry 602: Correspondence relating to the Bureau of Engraving and Printing, Records of the Bureau of the Public Debt, RG 53, NACP; Spencer Clark to Salmon Chase, Feb. 15, 1864, *idem*.

³⁴ Fractional Currency was currency having values under \$1 and was produced to alleviate the scarcity of silver coin during the war. Its production was authorized by the act of March 3, 1863. Also, the printing bureau in the Treasury was not recognized by Congress as the Bureau of Engraving and Printing until 1874.

Conclusion

In effect, the establishment of engraving and printing capabilities in the Treasury was a response to problems in the mechanics of Treasury security and currency issuance caused by the demands of war financing. Problems began with the growing need for currency processing. As the United States government had not issued its own currency before the Civil War, it had no facilities or procedures for processing and issuing it. Combine this state of unreadiness with the unprecedented and truly huge numbers of pieces of paper to be handled, and the immediate need for the currency, and the situation became a crisis of the first order. The solution was the mechanization of the process by a Treasury employee, Spencer Clark.

By the summer of 1863, Clark had set up in the Treasury a separate bureau to print and process United States Government currency and securities. This entity grew not from an act of Congress, but from pragmatic responses to the needs of the Treasury Department. As such, the Bureau of Engraving and Printing was not born of a philosophical desire for Government control of printing processes, challenging the political economy of *laissez-faire*, but from the chaos and panic of war. Consequently, the example of the BEP does not support theories that views on political economy changed during the Civil War. This is especially so if one considers congressional attempts in the 1870s to do away with the Bureau of Engraving and Printing.³⁵ However, the creation of the BEP does emphasize the power of a wartime crisis to engender government institutions with little dissent from a nation at war.

Photo credits: "Running the 'Machine,'" Treasury Building, Salmon P. Chase, Library of Congress; Spencer Clark, BEP Historical Resource Center; Demand Note, Bebee Paper Money Collection, American Numismatic Association.

³⁵ Franklin Noll, "Privatizing Currency Production: Deciding the Future of the Bureau of Engraving and Printing, 1878," February 28, 2007, manuscript.