

THE CIRCULATING MEDIUM DURING THE CIVIL WAR.¹

I.

GOLD AND SILVER COIN.

BEFORE the banks and the treasury suspended specie payments, December 30, 1861,² the monetary circulation of the United States consisted of (1) gold coin, (2) subsidiary silver coins for fractional parts of a dollar, (3) one cent pieces of a copper and nickel alloy, (4) treasury notes of the government payable on demand, and (5) circulating notes issued by banks chartered under state laws.³ The specie in circulation was estimated by the director of the mint in October, 1861, at from 275 to 300 millions, of which he thought not more than 20 millions were at the South;⁴ the demand notes outstanding were 33½ millions,⁵ and the bank notes reported as issued by the 1,289 institutions in the loyal states amounted to about 129 millions.⁶

Suspension threw this whole system into disorder. Gold coin, the only full legal tender money in use, was withdrawn from general circulation as soon as the banks and the treasury ceased paying it out, and the country was left dependent upon a currency of paper money which the issuers were not prepared to redeem in specie.

¹ The following paper is a chapter from a monograph entitled "A History of the Greenbacks with Special Reference to the Economic Consequences of their Issue 1862-1865," which will appear in the *Decennial Publications of the University of Chicago*, second series.

² See "The Suspension of Specie Payments, December, 1861," *JOURNAL OF POLITICAL ECONOMY*, Vol. VII, pp. 289-326.

³ Silver dollars had not been in common use for many years, because they were worth more as bullion than as money. See the table showing the average value of an American silver dollar each year from 1834 to 1862 in H. R. LINDERMAN'S *Money and Legal Tender in the United States*, New York, 1879, p. 161, and compare LAUGHLIN, *History of Bimetallism in the United States*, chaps. iv, v.

⁴ *Finance Report*, 1861, p. 62. ⁵ *Ibid.*, 1862, p. 9.

⁶ Compiled from the "Synopsis of the Returns of the Banks in the Different States," published in the *Finance Report* for 1862, pp. 189 ff.

It is not quite accurate to say that gold coin ceased to circulate. The banks continued to hold large amounts of specie in their reserves,¹ while the government paid interest on a large portion of its debt in gold and required the use of gold by importers in payments at the customs houses. More than this, there was a section of the country where the greenbacks did not succeed in displacing coin even in common business transactions.

In 1862 there seem, according to the treasury reports, to have been no banks in states west of Kansas and Nebraska.² Indeed, in California, the wealthiest and most populous of the western states, the existence of banks of issue was expressly prohibited by the state constitution.³ "Suspension" was, therefore, a much less momentous occurrence for these communities than for those of the East where business centered around highly developed banking systems. West of the Rocky Mountains men continued to buy and sell for coin, giving little thought to the fact that bank notes in circulation elsewhere were no longer redeemed in specie.

But when Congress, by the act of February 25, 1862, provided for the issue of \$150,000,000 of United States notes and made them a legal tender between individuals, the currency troubles of the rest of the country were brought home even to Californians. Under this law it was technically possible for a person who had bought goods from a San Francisco jobbing merchant to compel his creditor to accept in payment greenbacks worth considerably less than the expected gold. Elsewhere this situation had been prepared for by the use of notes of suspended banks for three months before the first United States notes were issued, and men adjusted their business transactions to suit the currency. But on the Pacific coast people

¹ According to the "Annual Reports on the Condition of the Banks," the amount of specie held by institutions in the loyal states increased from 76.4 millions at the beginning of 1862 to 81.5 millions at the beginning of 1863. *House of Representatives Executive Document* No. 25, Thirty-seventh Congress, third session, p. 209; and No. 20, Thirty-eighth Congress, first session, p. 211.

² See the bank reports cited in preceding notes.

³ Article IV, §§ 34, 35.

had been accustomed to a circulation of specie only and were very loath to surrender it. Business men consequently cast around for some means by which they could maintain the circulation of gold and prevent debtors from forcing them to accept greenbacks. One means to this end was the formation among the merchants of San Francisco in November of an agreement "not to receive or pay out legal tender notes at any but the market value, gold being adhered to as the standard." Firms that refused to enter into this agreement, or to abide by it, were to be listed in a black book and required in future dealings to pay cash gold for goods which they purchased.

Loyal observance of such a voluntary agreement, however, was difficult to maintain, and vigorous efforts were accordingly made to secure such action from the state legislature as would secure the same end by legal means. After several other proposals had been rejected, a "specific contract act" was finally passed and approved April 27, 1863. It provided in substance that contracts for the payment of specific kinds of money should be enforceable by legal process. After the constitutionality of this law had been affirmed by the state courts, business men were able to protect themselves against tenders of greenbacks effectively by inserting in all their contracts clauses specifying that payment should be made in gold coin. This became the general practice and consequently the people of California maintained a large circulation of specie during all the seventeen years that the rest of the United States were using paper money. Greenbacks were not prevented from circulating, but when they were passed it was usually at their gold, not at their nominal, value.¹

II.

BANK NOTES.

As has been said, the withdrawal of gold from circulation in other parts of the United States left the notes of the state banks

¹ BERNARD MOSES, "Legal Tender Notes in California," *Quarterly Journal of Economics*, Vol. VII, pp. 1-25; J. A. FERRIS, *The Financial Economy of the United States Illustrated*, San Francisco, 1867, Nos. V, XV.

and the federal treasury the only monetary circulation, aside from "deposit currency," available for use in large transactions. But neither the bank nor the treasury notes were at that time a legal tender, and consequently the circulation of both was for a time beset with difficulties that require discussion in some detail.

Though all the banks, with the exception of the banks of the states of Ohio, Kentucky, and Indiana, and a few scattering institutions elsewhere like the Chemical Bank of New York, had followed the example of the New York banks very promptly in suspending specie payments,¹ the suspension was perhaps nowhere complete. Banks very generally continued for some time to supply coin to their customers who required it for the payment of duties or any other necessary purpose.² Indeed, in those states where the banking laws imposed penalties for refusal to pay notes in coin the banks were obliged to redeem their notes whenever the holder insisted upon their so doing. Such was the case in New York. The state superintendent of banking was required by law to close any institution that failed to redeem its notes in coin within fifteen days after the notes had been protested.³ As the superintendent had no discretion in the matter, the banks were at the mercy of any note holder who chose to insist upon redemption in gold. Certain speculators in currency took advantage of the situation to collect bank notes systematically and send them in to the issuing institutions for payment in coin which they then sold at a premium.⁴ Fear of such operations made the banks unwilling to pay out their notes freely. Instead of notes they issued many certified checks,

¹ *Bankers' Magazine* (N. Y.), Vol. XVI, p. 650.

² *Ibid.*, Vol. XVI, p. 648 (Rhode Island); p. 649 (Philadelphia); Vol. XVII, p. 760 (Boston); *House of Representatives, Executive Document No. 25*, Thirty-seventh Congress, third session, p. 80 (Connecticut); p. 28 (New Hampshire); *New York Herald*, January 5, 1862. This and the subsequent references to newspapers gives the date of the "financial column."

³ See text of the law, *Bankers' Magazine*, Vol. XVI, p. 811.

⁴ *New York Herald*, January 20, 1862.

which for a time formed a prominent part of the circulating medium.¹

For such reasons there was a marked contraction in the bank note circulation in the first months of 1862. January 4, the New York city banks had outstanding 8.6 millions of notes; by March 1 this circulation had fallen to 5.4 millions. The hesitation of the banks ceased, however, when the treasury notes in circulation were made legal tender, for this measure provided funds other than coin which note holders pressing for redemption could be compelled to accept. Accordingly, the banks began to pay out their notes again, and, by May 3 their circulation was practically as large as it had been January 4.²

The situation in Ohio, Kentucky, and Indiana where the state banks did not suspend specie payments immediately did not long maintain its peculiarity. These banks were deterred from following the example of eastern institutions by clauses in their charters which forbade the redemption of their notes in anything but coin. In Ohio, however, the legislature enacted a law January 16, which granted immunity from the penalties for suspension to such banks as should advance coin to be used in paying the interest on the state's foreign debt.³ Similarly in Kentucky, "the banks of issue having consented to loan to the citizens of the state \$1,000,000 . . . the legislature passed an act on March 8, 1862, relieving the banks from the penalties for suspension of specie payments and authorizing them to pay out United States legal tender notes."⁴

The Bank of the State of Indiana and its branches, under the presidency of Hugh McCulloch, held out somewhat longer. December 31, McCulloch issued a statement that under no circumstances would the banks fail to redeem the pledge it had given to pay its notes in coin.⁵ In pursuance of this policy the

¹ *Hunt's Merchants' Magazine*, Vol. XLVI, p. 309.

² See the New York city bank statements, *ibid.*, p. 559. Compare *Report of the Secretary of the Treasury*, December, 1862, p. 15.

³ *Banker's Magazine*, Vol. XVII, pp. 163, and 793, 794.

⁴ KNOX, *History of Banking in the United States*, New York, 1900, p. 642.

⁵ *Bankers' Magazine*, Vol. XVI, p. 650.

managers of the branches were instructed "to redeem promptly in coin all notes that might be presented; to anticipate and prevent their return, as far as might be practicable, by taking them up at commercial points with other cash means; [and] to make arrangements with depositors by which deposits of gold should be paid in gold, deposits of bank notes in bank notes."¹ By this course "in a few weeks the larger part of the circulating notes of the branches were at rest in their vaults, and the business of the branches was reduced to what could be safely done upon their capitals and deposits." When, however, the legal tender act had been passed the question arose whether the bank might not legally use United States notes in discharge of its notes. After ascertaining that the courts would give prompt trial to a case involving this important question, Mr. McCulloch, in order to make a test case, directed that greenbacks be tendered in payment of a note. The Supreme Court of Indiana decided that the legal tender act was constitutional, and that the bank might redeem its notes in notes of the government. When this decision was rendered the bank at once commenced paying out its notes again.²

The same question regarding the availability of greenbacks for redemption of bank notes that under state laws were payable only in coin, had to be faced in other states. In New York the question was peculiarly pressing because the legislature was powerless under the constitution to pass such measures of relief as were enacted in Ohio and Kentucky.³ To determine whether banks could avail themselves of the act of Congress making treasury notes a legal tender, test cases were arranged by the superintendent of the banking department and a decision obtained in June, 1863 from the court of appeals maintaining the constitu-

¹ H. McCULLOCH, *Men and Measures of Half a Century*, p. 136.

² *Ibid.*, pp. 136-8.

³ Article 8, § 5 of the constitution provided that "the legislature shall have no power to pass any law sanctioning in any manner . . . the suspension of specie payments by any person, association, or corporation issuing bank notes of any description." *Bankers' Magazine*, Vol. XVIII, p. 811.

tionality of the law.¹ This and similar decisions rendered in other states removed the last doubt about the right of banks to use the greenbacks instead of gold coin as reserves and put them in a position to issue their own notes freely.

The increase in the circulation of the state banks after the passage of the legal tender act was very general. Secretary Chase estimated that the notes issued by banks in the loyal states were 167 millions, November 1, 1862 as compared with 130 millions a year before.² The "Annual Report on the Banks in the United States" for 1863, though not without omissions, made the circulation in the same states about the first of the year nearly 181 millions.³ Bank deposits increased with like rapidity. According to the bank reports the deposits in the loyal states were 257 millions in January, 1862, and 367 millions in January, 1863.⁴ After April 1, 1863, however, the increase of circulation seems to have been checked by the tax imposed of 1 per cent. a year on certain proportions of the notes outstanding and 2 per cent. on amounts in excess of the specified proportions.⁵

Shortly thereafter the organization of new national banks and the conversion of state into national banks introduced a new element into the circulating medium. As the issue of national bank notes proceeded for several years more rapidly than the withdrawal of the state bank issues, there was again an increase in the total bank circulation.⁶ But aside from this increase the change was merely the substitution of a more uniform and

¹ See *Annual Report of the Superintendent of the Banking Department of the State of New York*, January 7, 1864. *Bankers' Magazine*, Vol. XVIII, pp. 811-13. The full text of the court's opinion is published, *ibid.*, p. 345 ff.

² *Report of the Secretary of the Treasury*, December, 1862, p. 14.

³ *House of Representatives Executive Document* No. 20, Thirty-eighth Congress, first session, p. 210.

⁴ *Ibid.*, *loc. cit.*, for 1863, and *House of Representatives Executive Document* No. 25, Thirty-seventh Congress, third session, p. 208, for 1862.

⁵ Act of March 3, 1863, § 7, 12. Statutes at Large, 712.

⁶ See the statement of bank notes outstanding in the *Statistical Abstract of the United States*, 1878, p. 14.

better secured kind of notes for the diverse issues of the state banks.

III.

OLD DEMAND NOTES.

The circulation of the demand treasury notes was for a time beset by more difficulties even than was the circulation of bank notes. The first issues of these notes by Secretary Chase in the late summer and autumn of 1861 was opposed by the banks which subscribed to the \$150,000,000 loan. When the Secretary insisted on making the issues, however, they yielded and with few exceptions made no difficulty about receiving such of the notes as were brought to them by depositors.¹ The situation changed, however, when the treasury, by suspending specie payments, gave notice that these notes would not be redeemed in coin.² At this time there were \$33,460,000 in circulation.³ Early in January the New York banks held a meeting to discuss what policy should be pursued with regard to them. Opinion was divided and the meeting ended with the adoption of a vague resolution "That before we consent to receive such notes, we must require that such legal provision be made by Congress as shall insure their speedy redemption, and that a committee of this association be appointed to consider that subject and report

¹ Cf. JOURNAL OF POLITICAL ECONOMY, Vol. VII, pp. 310, 311; BRECKENRIDGE, "The Demand Notes of 1861," *Sound Currency*, Vol. V, No. 20.

² It has been stated in an official document that "the demand notes were paid in gold when presented for redemption," and that this, with their receivability for all public dues, "prevented their depreciation." (*Information Respecting United States Bonds, Paper Currency, Coin, etc.*, Revised ed. United States Treasury Department Circular, No. 123, July 1, 1896, p. 7.) This has been the common view and is found *e. g.*, even in the work of so recent a writer as Professor A. B. Hart (*Life of Chase*, p. 242). But none the less it is certainly an error. Mr. Chase himself said, "The banks of New York suspended on the 30th of December, 1861, . . . and the government yielded to the same necessity in respect to the United States notes then in circulation." (*Report of the Secretary of the Treasury*, 1862, p. 7; cf. *American Annual Cyclopædia*, 1861, p. 300; and *Hunt's Merchants' Magazine*, Vol. XLVII, p. 509.) More than this, the "old demand notes," as the issue came to be called, did depreciate in value, which could hardly have happened had they been "paid in gold when presented for redemption."

³ *Report of the Secretary of the Treasury*, December, 1862, p. 9.

to an adjourned meeting.”¹ Of course this resolution procured no action by Congress, and the committee was unable to frame a policy acceptable to all the banks. Some institutions took the notes without question as current funds, while others did not.² The American Exchange Bank, for example, issued a circular dated January 1, 1862, informing its dealers and correspondents that it would not accept treasury notes from them, unless they would sign a contract to accept payment in the same notes at par.³

But so long as a portion of the subscriptions to the \$150,000,000 loan remained unpaid almost all of the banks were ready to receive demand notes at least in small quantities, because they could be used in making payments into the subtreasury.⁴

After the last instalment on the loan had been paid on the morning of February 4, the disinclination to receive the notes as current funds became much stronger. Banks could no longer find an outlet for them at the subtreasury, and they could not be certain that depositors would accept such notes in payment of checks, since they were not yet legal tender. The metropolitan banks seem to have been rather more liberal than those of Boston, Philadelphia and other cities.⁵ But even in New York there was apparently a considerable number of large institutions that discriminated against the treasury notes and accepted them only as “special deposits,” repayable in kind.⁶ Refusal to take

¹ *Banker's Magazine*, Vol. XVI, p. 647.

² *New York Herald*, January 2, 5, and 6, 1862.

³ *Bankers' Magazine*, Vol. XVI, p. 647. Compare the similar circulars received by Chicago banks from their New York correspondents, *Hunt's Merchants' Magazine*, Vol. XLVI, p. 293.

⁴ *New York Herald*, February 4, 1862, and *Hunt's Merchants' Magazine*, Vol. XLVI, p. 309. The banks of Boston acted in similar fashion. Though these banks were forbidden by their charters to pay out any notes except their own, a resolution was adopted, January 10, that banks concerned in the government loan should accept treasury notes “receivable for government dues to the extent of 25 per cent. of their subscriptions to said loan, including such notes as they may have on hand.” *Bankers' Magazine*, Vol. XVI, p. 648.

⁵ *New York Herald*, January 24 and 29, 1862.

⁶ *Ibid.*, February 4 and 5, 1862. *Hunt's Merchants' Magazine* states that this course was pursued by a majority of the banks, Vol. XLVI, p. 309.

the notes on the part of even a few banks in the clearing-house association made serious trouble for the other institutions that desired to receive them without question. For, if one of the more liberal banks accepted demand notes on deposit as current funds, it had to make provision for meeting checks drawn against this deposit and presented at the clearing house by other institutions. At the clearing house, however, the demand notes would not be accepted in payment of a balance, and the bank that had taken such notes from its customers had therefore to provide other funds for meeting the checks, or, if it did not have sufficient currency of other kinds, to take out loan certificates on which 7 per cent. interest was charged.¹

This situation seems to have given much concern to the treasury authorities. Though the treasury notes were commonly accepted in business transactions between individuals without question,² men could not use them freely at the banks, and consequently persons who received large quantities were compelled to sell them at a slight discount.³ It was the desire to prevent such discrimination against the treasury notes that Mr. Chase gave as his reason for urging the retention of the legal tender clause in the bill introduced by Mr. Spaulding.⁴

While the bill was still pending, another scheme for the same purpose was devised. Mr. Cisco, the head of the New York subtreasury, suggested and Chase authorized the acceptance of the treasury notes on deposit at the subtreasuries at 5 per cent. interest.⁵ It was apparently their expectation that the banks would now accept the notes with the intention of depositing them at the sub-treasury and so drawing interest upon

¹ *Hunt's Merchants' Magazine*, Vol. XLVI, p. 309. Cf. the remarks of Senator Simmons in the *Congressional Globe*, Thirty-seventh Congress, second session, p. 794.

² *New York Herald*, February 9; *Shipping and Commercial List*, February 19, 1862.

³ According to the *New York Tribune*, February 13, 1862, the selling price was one-fifth of one per cent. below par, while notes could be bought of the street brokers at half this discount.

⁴ Letter of January 29, 1862, to Thaddeus Stevens. *Congressional Globe*, Thirty-seventh Congress, third session, p. 618. Cf. remarks of Mr. Bingham, *ibid.*, p. 639.

⁵ Cf. SCHUCKERS, *Life of Chase*, p. 269.

a part of their current funds.¹ But the plan was received less kindly than had been hoped. On February 8, about half a million was deposited with Mr. Cisco, and by the 11th another million had been added.² But these deposits seem to have come mainly from savings banks and out-of-town institutions.³ Most of the city banks looked upon the plan as a bid to induce the public to deposit with the sub-treasury instead of with themselves.⁴

For the time, therefore, this plan accomplished little, and the demand notes continued to rule at a slight discount until the passage of the legal tender act.⁵ The first reports of the law that reached New York indicated that the treasury notes already in circulation, as well as the new issues, had been made a legal tender.⁶ An amendment to this effect had indeed been made by the Senate on motion of John Sherman;⁷ but it had not been agreed to by the House of Representatives,⁸ and at the recommendation of the Committee of Conference the Senate receded from it.⁹ Though the report was false it changed the attitude of the hesitating banks toward the notes. The new law provided that customs should be paid not in paper money but in coin. From this rule, however, an exception was made in favor of the old demand notes, because the act under which they were issued declared them "receivable in payment of public dues."¹⁰ If made legal tender, then, the old notes would differ from the new only in possessing a virtue lacked by the latter—availability for use at the customs house in place of coin. As but 60 millions of the demand notes had been authorized, and as they were to be replaced as rapidly as feasible by the new issues, it seemed

¹ Cf. *Hunt's Merchants' Magazine*, Vol. XLVI, p. 310; *New York Herald*, February 9, 1862.

² *New York Herald*, February 8 and 11, 1862.

³ *Ibid.*, February 14.

⁴ *Hunt's Merchants' Magazine*, Vol. XLVI, p. 310.

⁵ *New York Tribune* February 13, and *Shipping and Commercial List*, February 19, 1862.

⁶ *New York Times*, February 26; *Herald*, March 3.

⁷ *Congressional Globe*, Thirty-seventh Congress, second session, p. 771.

⁸ *Ibid.*, p. 888.

⁹ *Ibid.*, p. 929.

¹⁰ Act of August 5, 1861, § 5, 12 Statutes at Large, 313.

likely that there would be a strong demand for them from importers who had duties to pay. Consequently even the banks that had hitherto refused to receive the notes as current funds, now refused to pay them out, and instead of being at a discount of $\frac{1}{10}$ to $\frac{1}{8}$ they rose to a premium of $\frac{1}{8}$ to $\frac{1}{4}$.¹ This advance to a premium, however, proved premature. When after three or four days it was found that the retirement of the old notes could not commence until the new notes were printed, that this would require at least a month, and that in the meantime the treasury must continue to pay out the old notes, they fell again to par.² And when on the 4th of March the full text of the legal tender act was received, and it was found that the legal tender clause included only the new issues, some of the banks reverted to their former policy and began again to discriminate against the government notes. This caused them to fall once more to a discount.³

The discovery that the old demand notes had not been made legal tender seems to have been as much of a surprise to many members of Congress as it was to business men in New York. Steps were taken at once to remedy the omission. A clause making the treasury notes already in circulation a legal tender was inserted in the bill to authorize the purchase of coin for the payment of interest on the public debt, which Thaddeus Stevens introduced into the House March 6.⁴ When this bill received President Lincoln's signature, March 17,⁵ there was no longer any reason for discriminating against the demand notes, and they returned for a short time to par.⁶

¹ New York *Times*, February 26 and 27, 1862; *Herald*, February 27 and 28; *Commercial Advertiser*, February 26, 27, 28 and March 1; *Shipping and Commercial List*, March 1.

² New York *Herald*, March 1 and 3; *Times*, March 3.

³ New York *Herald*, March 4; *Commercial Advertiser*, and *Shipping and Commercial List*, March 5.

⁴ *Congressional Globe*, Thirty-seventh Congress, second session, pp. 1103 and 1116.

⁵ 12 Statutes at Large, 370.

⁶ In fact, the notes returned to par as soon as it was known that the clause had been introduced, because it was a foregone conclusion that the measure would become a law.—New York *Commercial Advertiser*, March 8.

Meanwhile the New York banks had taken action that put an end to all opposition on their part to the use of the treasury notes. At a meeting held March 7, 1862, they determined to make their clearings in certificates issued by the assistant treasurer for deposit of the demand notes with him at 5 per cent. interest.¹ This arrangement, which went into effect March 10, made treasury notes the standard for all banking operations in current funds.² Foreseeing that when the new notes were ready for issue the old notes receivable for customs would be more valuable, Mr. Cisco published a notice March 14, that all certificates of deposit issued in the future would be paid in any notes that were legal tender.³ The new respect in which the old demand notes were coming to be held was shown by the fact that this notice caused a falling off in the daily deposits. The check was only temporary, however, for the new notes became themselves available for deposit early in April.

From the 7th of March, then, the old demand notes were current funds in New York and passed without question at par. But soon after the appearance of the greenbacks their position changed again. The first greenbacks in New York came in a remittance of \$4,000,000 received by the assistant treasurer April 5.⁴ A large sum was paid out the same day and from this time on issues were so rapid that 90 millions were outstanding before the 7th of June.⁵ All through April the old demand notes circulated side by side with the new notes at par.⁶ But as the supplies of the latter currency became sufficient for the wants of business a difference became apparent between the treatment of the two issues. Owing to their receivability for customs, the old demand notes were preferred, and as early as the second week in May they began to be quoted regularly

¹ *Bankers' Magazine*, Vol. XVI, pp. 809-11.

² Cf. *New York Times*, March 10.

³ See text in *Annual American Cyclopaedia*, 1862, p. 456.

⁴ See the financial columns of the New York papers under this date.

⁵ *House of Representatives Miscellaneous Document* No. 81, Thirty-seventh Congress, second session, p. 1.

⁶ *Hunt's Merchants' Magazine*, Vol. XLVII, p. 33.

at a premium which, slight at first, gradually rose as the volume in circulation became smaller and the premium on gold for which they served as a substitute at the customs house became higher. The possibility of obtaining this premium caused holders of old demand notes to hoard them just as they had hoarded gold in January. When Mr. Chase wrote his letter of June 7th requesting authority for a second issue of greenbacks he said that the \$56,500,000 of the old demand notes then outstanding were "held by banks and capitalists, and not used as circulation."¹ They were sold from time to time to importers and used in the payment of duties. As they came into the treasury through the customs houses, the old demand notes were canceled and replaced by greenbacks. By this process the amount outstanding had been reduced to $3\frac{1}{3}$ millions by June 30, 1863.² This withdrawal from circulation in May, 1862, closed the brief but eventful history of the old demand notes as a part of the circulating medium.

From what has been said it is clear that the business public must have suffered considerable inconvenience from the uncertainty regarding the currency between the time of suspension and of abundant issues of the greenbacks. Gold had ceased to be used in ordinary transactions; notes of state banks, always inconvenient, were in many cases not issued freely for prudential reasons and had to be replaced in considerable measure by certified checks, and the treasury notes were most of the time discriminated against by many banks. The appearance of the greenbacks in large amounts afforded relief from such difficulties, though the wide and rapid fluctuations in their value gave rise to other embarrassments of a more serious character.

IV.

"SHINPLASTERS" AND FRACTIONAL CURRENCY.

One difficulty with the currency, however, the greenbacks could not meet. While they served as a convenient medium of

¹ *House of Representatives Miscellaneous Document No. 81, Thirty-seventh Congress, second session, p. 1.*

² *Report of the Secretary of the Treasury, December, 1863, p. 45.*

exchange in large transactions, they did not supply the want of small change, for the first legal tender act had forbidden the issue of notes less than five dollars.¹ Hardly had the perplexities of business men who handled currency in large amounts been relieved by the free issues of the greenbacks when yet greater inconveniences began to be felt by everyone from the lack of fractional coins.

When specie payments were suspended the subsidiary silver coins did not disappear from circulation at once as did gold, for reasons found in existing coinage laws. While a dollar contained 371.25 grains of pure silver, only 345.6 grains were put into two half dollars, four quarters or ten dimes.² In January, 1862, one grain of gold was selling for 15.35 grains of silver.³ At this ratio a silver dollar was worth \$1.04 in gold, while two halves, four quarters, or ten dimes were worth but 97.05 cents. While, therefore, there was a profit in treating gold coin as bullion instead of as money the moment a fractional premium appeared upon it in paper, there was no profit in exporting or in melting subsidiary silver coins until the premium on gold had risen sufficiently above 3.1 per cent to give brokers compensation for collecting the coins and shipping them to Canada. For, when gold stood at $103\frac{1}{10}$, a paper dollar was worth 97 cents in gold—just as much as 10 dimes. It was therefore a matter of indifference to the possessor of subsidiary silver coins whether he paid it over as current funds in purchasing commodities or sold it for paper money. But when gold rose above $103\frac{1}{10}$, a paper dollar became worth less than 10 dimes, and a person who had the latter could make them go farther in the payment of debts by selling them for paper money and giving it to his creditor than by handing him the silver itself. Since, however, some trouble and expense were involved in melting or exporting coins of small denominations, it was a nice question how high the

¹§ 1. 12 Statutes at Large, 345.

²Act of February 21, 1853. 10 Statutes at Large, 160. Cf. LAUGHLIN, *History of Bimetallism in the United States*, chapter v, § 4.

³See the table in LAUGHLIN, *op. cit.*, Appendix II, F.

premium on gold must rise above $3\frac{1}{10}$ before the silver would disappear from circulation.

For the first week after payments in specie had been stopped the premium on gold varied from 1 to 3 per cent.¹ But on the 8th of January it rose to $3\frac{1}{2}$ and on the 9th to $4\frac{1}{4}$. At the latter premium a paper dollar was worth 95.92 cents in gold, or 1.13 cents less than 10 dimes. According to the money column of the New York *Herald* this slight difference sufficed to induce brokers to begin the purchase of silver coins. "An inquiry has sprung up for silver," reports the financial writer on the 9th, "which has been held at 1 per cent. premium." It is not improbable, however, that purchases of silver on so slight a margin were prompted rather by anticipations of the profit that could be made if the premium on gold continued to advance than by the opportunity for immediate profit. If so, the buyers of silver were disappointed, for after rising to 5 on the 10th of January, the premium fell again below 4.² During February the average premium was 3.5, during March 1.8, during April 1.5, and during May 3.3. At such low prices for gold, or more accurately, at such high prices for paper money, there was no profit in buying subsidiary silver coins for export or melting, and consequently they continued to circulate as money. But in June, when the hopes of a speedy end of the war were being dispelled, the paper money fell in value, that is, the premium took an upward turn. From $3\frac{9}{16}$ on the first Monday of the month, the premium rose to $4\frac{5}{16}$ on the second Monday, $6\frac{5}{8}$ on the third, $7\frac{3}{8}$ on the fourth, and $9\frac{1}{16}$ on the fifth.³ With gold at the last named premium, a paper dollar was worth 91.69 cents in gold—a price which afforded an ample margin of profit for the purchase for export of silver coins worth 97.05 cents.

Accordingly, the newspapers late in June and early in July

¹ Cf. Money articles of the New York papers, especially the *Commercial Advertiser*.

² See the table of daily premiums in the JOURNAL OF POLITICAL ECONOMY, Vol. VI, pp. 286 ff.

³ These figures are averages of the highest and lowest prices of gold recorded each day.

began to remark a rapid disappearance of small change from circulation. For example, the Springfield *Republican* of July 2, 1862, said, "The ruling premium of 5 to 6 per cent. on silver coin, as compared with the paper currency in use, is fast driving it out of circulation. Laboring people and those of small means are constantly to be seen at brokers' offices selling \$10 to \$50 of silver change at $2\frac{1}{2}$ per cent. premium, which the brokers ship to Europe where they can realize 6 or 7 per cent. in comparison with our irredeemable paper currency." Similarly, the New York *Times* of July 18 declared that, "The annoyances suffered in this city and throughout the country, during the last two or three weeks, on account of the scarcity of specie, have been unspeakable, and in many lines of business, the loss of custom and profit has been heavy."¹ Though over 45 millions of subsidiary coins had been struck under the act of 1853,² of which perhaps three-fifths circulated in the loyal states,³ nearly the whole amount seems to have been withdrawn from use as currency between the middle of June and the middle of July. Apparently, the brokers who purchased the coin exported most of it. Over $3\frac{3}{4}$ millions were carried to Canada in 1862 by a single express company.⁴ American coin became a drug in the Canadian market and was accepted only at a discount.⁵ Considerable amounts were shipped also to South America and a sum large in the aggregate was no doubt kept for a long time in small hoards.⁶

Of course the disappearance of the silver coins from circulation caused serious inconvenience in retail trade. Various shifts were tried to supply their place. In Philadelphia old Spanish quarter dollars were brought again into use. These coins had formed a considerable portion of the small change

¹ Compare New York *Tribune*, July 9 and 16; *Commercial Advertiser*, July 10 and 16; Chicago *Post*, July 15, and other references in the following notes.

² *Report of the Director of the Mint*, October, 1862, p. 49.

³ Cf. *Hunt's Merchants' Magazine*, Vol. XLVII, p. 155.

⁴ *Annual American Cyclopaedia*, 1862, p. 468.

⁵ Cf. *Bankers' Magazine*, Vol. XVIII, pp. 83 and 482, Vol. XIX, p. 699.

⁶ KNOX, *United States Notes*, p. 100.

before an abundant supply of American silver was furnished under the act of 1853. From long use they had become light in weight. The act of February 21, 1857 provided that they should be accepted by the government offices for twenty instead of twenty-five cents.¹ When the American silver was withdrawn a few of these old coins, because of the less amount of silver left in them, came out of retirement and passed current again as quarters of a dollar.²

Another method of meeting the situation was to decline to make change for paper bills at all, or else to charge a premium for the silver returned. This plan is said to have been adopted for a time by transportation companies and many retail shops in New York city.³ A third device was to cut dollar bank bills into halves or quarters and pass these for 50 and 25 cents. In Hartford, Conn., it was said that some \$20,000 of the bills of the Ætna Bank were floating about cut in two.⁴ A more ingenious scheme was hit upon by the Farmers' Bank of Mount Holly, New Jersey, which paid out notes for \$1.25, \$1.50, and \$1.75 to enable people to make change within twenty-five cents by returning a dollar bill.⁵ Much commoner, however, was the issue of notes for fractional parts of a dollar, colloquially called "shinplasters." Though the laws of many states forbade any bank to put into circulation notes less than one dollar, a few institutions adopted this plan relying upon the obvious need of fractional currency to secure immunity from prosecution.⁶ But most of the "shinplasters" seem to have been issued by individuals or firms not engaged in banking. In Chicago, for instance, the city railway company supplied twenty-five-cent tickets which the conductors gave in exchange for paper bills and accepted for fares.⁷ In Boston Young's Hotel started a sys-

¹ 11 Statutes at Large, 163, and LINDERMAN, *Money and Legal Tender*, p. 32.

² *Springfield Republican*, July 15, 1862. ³ *New York Tribune*, July 9 and 16.

⁴ *Bankers' Magazine*, Vol. XVII, p. 404. On similar practices elsewhere see *ibid.*, p. 821.

⁵ *Ibid.*, p. 316.

⁶ For example of such illegal issues by a banker of Reading, Pa., see *ibid.*, p. 475.

⁷ *Chicago Post*, July 15, 1862.

tem of checks for fifteen, twenty-five, and fifty cents with the proprietor's signature attached—an example that saloons, restaurants, and retail shops were quick to follow.¹ Many of these issues were made by irresponsible persons and consequently resulted in loss to those who accepted them.² Partly to protect the public from such losses and partly to obtain a “loan without interest” many towns and cities provided for municipal issues of small notes. The city council of Newark, New Jersey, for instance, voted, July 11, “to issue promissory notes to the amount of \$50,000 in denominations ranging from ten cents to fifty cents” and redeemable by the city in sums of \$10 or more.³ This example was followed by Jersey City, Wilmington, and Albany, and a proposition of this character was dropped in Philadelphia only because it was found to be contrary to state law.⁴

These various substitutes for the silver coins furnished a fractional currency that, although unsatisfactory, had to be tolerated for a time as a makeshift. Secretary Chase, however, took steps promptly to relieve the general embarrassment. He called the attention of Congress to the matter in a letter written July 14, and Congress responded by authorizing the use of “the postage and other stamps of the United States” as currency.⁵

Though this act was approved by the President only three days after Chase's letter was written, some time elapsed before it afforded substantial relief. The chief immediate effect was to cause the use of ordinary letter postage stamps for small change. In New York where as a rule about \$3,000 of stamps were sold daily, the sales ran up to \$10,000 on the day after the bill was approved, and next day to \$16,000.⁶ Such stamps, how-

¹ Springfield *Republican*, July 15, 1862.

² Cf. quotations from the Philadelphia *Ledger* in the *Bankers' Magazine*, Vol. XVII, p. 823.

³ New York *Times*, July 13, 1862.

⁴ See *Bankers' Magazine*, Vol. XVII, pp. 823, 566, 316, and 161 respectively.

⁵ Act of July 17, 1862, 12 Statutes at Large, 592.

⁶ *Bankers' Magazine*, Vol. XVII, p. 159.

ever, were exceedingly inconvenient for use as currency because of their small size and their propensity for sticking together and getting crumpled. To take their place Secretary Chase caused a series of special stamps in denominations of 5, 10, 25, and 50 cents to be prepared.¹ They were about $2\frac{3}{4}$ by $3\frac{3}{8}$ inches in size, printed on both sides and not gummed.² The first issues were made late in August.³

In order to force the withdrawal of the "shinplasters," attorneys of the national and local governments in some districts published notices warning the public that the penalties imposed by federal and state laws upon the issue of small notes by unauthorized persons would be vigorously enforced by prosecutions.⁴ Municipal "shinplasters," however, were not affected by the Postage Currency Act which forbade such issues only to "private corporations," firms and individuals.⁵ Town and city notes continued therefore to circulate unhindered for a considerable time.

The difficulties with the fractional currency do not seem to have come to an end even by the close of 1862. The various substitutes for coin could not be dispensed with until the "postage currency" became abundant enough to supply the demand for small change, and at first the issues were rather slow. By the end of September but \$787,700 had been placed in circulation, and in the next two months the total reached less than four millions.⁶ In December Mr. Chase reported that it had been "found impossible to keep pace with the public demand for this

¹ *Report of the Secretary of the Treasury*, December, 1862, p. 28.

² Representations of this "postage currency" are given by KNOX, *op. cit.*, pp. 105-8.

³ KNOX, *op. cit.*, p. 104; *Bankers' Magazine*, Vol. XVII, p. 239.

⁴ For example see the notice given in New York city, *Bankers' Magazine*, Vol. XVII, p. 256, and compare the action taken by the bank commissioners of Illinois, *ibid.*, p. 567.

⁵ § 2. 12 Statutes at large, 592. See also the correspondence between the chairman of the finance committee of Wilmington and the commissioner of internal revenue. *Bankers' Magazine*, Vol. XVII, p. 566.

⁶ *Report of the Secretary of the Treasury*, December, 1862, pp. 43, and 12.

currency," and that although the daily issue had "been rapidly increased to \$100,000," and was then being "extended as fast as practicable to twice that amount," the supply was still "largely deficient."¹

In the West the St. Louis *Republican* of December 10 stated that "There is still much complaint of the scarcity of small change,"² and in the East the Springfield *Republican* of the same date reported that "shinplasters" were still in circulation. In the same month the city council of New York passed an ordinance providing for the issue of 5, 10, 25, and 50 cent notes, which the *Bankers' Magazine* declared to be "a necessity growing out of the scarcity of change in this city."³ Ordinary postage stamps also continued in use side by side with the deficient "postage currency" despite the efforts of the post-office department to prevent it. The postmaster-general in his report dated December 1, 1862, said :

Postmasters were specially instructed to discontinue sales of stamps to persons evidently designing them for use as currency; but, notwithstanding the precaution taken and the checks adopted . . . the demand has until quite recently been largely in advance of the daily manufacture . . . the majority of applications . . . from postmasters were only partially filled, generally but one-half the number asked for having been sent. . . . The aggregate value of the postage stamps and stamped envelopes sold at 29 of the larger post-offices during the third quarter of 1862 was \$1,400,937.48, and during the corresponding quarter of 1861 was \$606,597.40, showing an excess in favor of 1862 of 794,340.08. . . . Nearly the entire excess . . . has been or is now in use as currency.⁴

In the winter months, however, the supply of "postage currency" became more adequate to the needs of retail trade. Nearly seven millions had been issued by the end of December, 1862, and 12 millions more were added in the next three months.⁵ When people could obtain this federal currency, they

¹ *Ibid.*, pp. 28, 29.

² Quoted in *Bankers' Magazine*, Vol. XVII, p. 568.

³ Vol. XVII, p. 562. Mayor Opdyke, however, did not agree with this view, and vetoed the measure. New York *Tribune*, December 22, 1862.

⁴ *House of Representatives Executive Document* No. I, Thirty-seventh Congress, third session, Vol. IV, pp. 131, 132.

⁵ BAYLEY, *National Loans of the United States*, p. 159.

manifested a strong disposition to reject postage stamps and "shinplasters"—even those issued by the towns. The Springfield *Republican* of January 29 said:

There is a general agreement throughout the country to banish all private and corporate shinplasters and use only the government postage currency for change after the first of February. In Boston already, none but those of the Parker House remain in circulation, and these are refused at many stores, and are being fast retired. . . . A few choice shinplasters may be temporarily retained in special localities, till sufficient of the postal currency works in to accommodate public wants. . . . There are large amounts of the postal currency in circulation, and much is hoarded that will come out as soon as the other sort is banished.¹

As late as March the Philadelphia *Ledger* said:

Now Philadelphia is tolerably well supplied with small currency authorized by the government, while at New York and other eastern points they are suffering great inconvenience and much loss by an immense circulation of all sorts of trash. . . . So intolerable has the nuisance become, everybody is denying them, causing quite a panic among the poorer classes—those least able to bear the loss. . . . Nobody but the brokers will deal in them now. . . . The corporation issues of Newark and Jersey City . . . more popular than others . . . are included in the general decree of banishment. . . . The people will take nothing but government postage currency for small change. There appears to be no lack of it now.²

To protect holders of postage stamps that had been used as currency from losses similar to those suffered by holders of shinplasters the postmaster-general was obliged to order the redemption of such stamps as were evidently uncanceled.³

May 27, 1863, issues of the postage currency ceased, after 20 millions had been placed in circulation. Its place was taken by the "fractional currency" authorized by the Act of March 3, 1863,⁴ The new notes were made of thinner but stronger paper, could not be counterfeited easily, and were not injured by wet-

¹ Compare the notices published by the same newspaper at the head of its editorial section January 23, that "no shinplasters or postage stamps except in the sheet," would be received in remittances after that date. See also notice of January 27.

²Quoted in *Bankers' Magazine*, Vol. XVII, p. 823.

³ *Report of the Postmaster-General* cited above, p. 133, and *Annual American Cyclopædia*, 1862, p. 463.

⁴§ 12 Statutes at Large, 711.

ting.¹ But aside from the technical superiority of the new issues as currency, the change was one only in name. The title "postage currency" had been a misnomer, for the notes were not like ordinary postage stamps. Issues of the new notes commenced October 10, 1863. By the 30th of June, 1864 about $7\frac{3}{4}$ millions of the fractional currency had been put in circulation while 5 millions of the postage currency had been withdrawn, so that the whole amount outstanding was not quite 23 millions.² The same process of withdrawal of the old and substitution of the new notes was continued during the next year. The amount of postage currency decreased from 15 to 10 millions, while the amount of the fractional currency increased from $7\frac{3}{4}$ millions to 15. Thus at the end of the war the aggregate fractional currency of both kinds in use was 25 millions.³

V.

MINOR COINS.

The difficulties with the circulating medium did not stop with the subsidiary coins of silver, but extended even to the minor coins of base metals. The act of February 21, 1857 had provided for replacing the old copper cents of 168 grains by coins weighing 72 grains and composed of 88 parts copper and 12 parts nickel.⁴ Of these new cents there had been issued 116,066,000 by June 30, 1862.⁵ The work of exchanging the new for the old coins was still going on, but the director of the mint reported in October, 1862 that the number of old cents was rapidly diminishing and that they would soon disappear altogether from circulation.⁶ The new cents, together with such of the old as still remained in use, were the only minor coins,

¹ *Bankers' Magazine*, Vol. XVIII, p. 364.

² *Report Secretary of the Treasury*, December, 1864, p. 45.

³ *Report Secretary of the Treasury*, December, 1865, p. 53.

⁴ § 4. 11 Statutes at Large, 163.

⁵ *Reports of the Director of the Mint*, October, 1857 and 1862, pp. 49 and 57 respectively. Here and in other citations of the *Reports of the Director of the Mint* the pages refer to the Finance Reports.

⁶ P. 46.

for the making of half cents had been stopped by the Act of 1857, and two, three, and five-cent pieces were not authorized until 1864, 1865 and 1866, respectively.¹

The withdrawal of the silver coins from circulation in June and July caused a marked extension in the use of the nickel cents as substitutes. To make them serve more conveniently in the place of silver, cents were sometimes done up in rolls of twenty-five and passed from hand to hand, frequently without opening.² The demand for these coins at the mint suddenly became very great. 3,600,000 pieces were struck at Philadelphia in July and there was a great rush to procure them.³ "Large amounts," said the director of the mint in October, "have been sent to every part of the country, and orders beyond our ability to fill are constantly forwarded to the mint."⁴ The number of cents coined increased from 10 millions in the fiscal year 1861 and 12 millions in 1862, to 48 millions in 1863.⁵

It is a curious but well-attested fact that the nickel cents went to a premium almost as soon as the subsidiary silver coins. The New York *Commercial Advertiser* of July 10 reported that while gold was at 17 per cent. premium in paper, silver was at 10 and nickel at 4 per cent. A similar condition was noted by the Springfield *Republican* July 15th, and the director of the mint in his annual report for 1863 said that "for the past two years" cents had "commanded a premium" and were then "scarcely to be had."⁶

The cause for a premium on cents at the time was, however, different from the cause for the premium on gold and silver coins. The latter were at a premium because the bullion in them was of more value than the corresponding sums of paper money. According to the director of the mint, however, the cent in 1862 cost "the government scarcely half a cent,"⁷ and,

¹ *Coinage Laws of the United States, 1792 to 1894*. Fourth ed., p. 89.

² *Springfield Republican*, July 15, 1862.

³ *Bankers' Magazine*, Vol. XVII, p. 390.

⁴ *Report*, p. 46.

⁵ *Report of the Director of the Mint*, October, 1865, p. 237.

⁶ P. 189.

⁷ *Report*, p. 49.

again, in 1863 he reported that nickel cents contained a "half cent's worth of metal, more or less, according to market fluctuations."¹ These statements of cost to the government, however, do not necessarily show the market value of cents as bullion, because a large part of the metal used in their manufacture was imported,² and the duties which private men would have to pay were remitted to the mint. But these duties were not heavy enough to make a very great difference. Under the Tariff Act of July 14, 1862, imported nickel paid a tax of but 10 per cent. *ad valorem*, and under the Act of June 30, 1864 this rate was increased but to 15 per cent.³ Meanwhile copper in pigs, bars, or ingots, paid two cents a pound, according to the law of March 2, 1861, and 2½ cents, according to the act of June 30, 1864.⁴

Consequently, even if the director's estimates of cost be taken to mean cost on a specie basis and 10 per cent. be added for the duties, 100 of the one cent coins would have had a market value as bullion of not more than 55 cents in gold. On this estimate cents would not have gone to a premium in paper currency for the same reason as gold and silver until the specie value of a paper dollar was less than 55 cents—that is, until gold was at a premium of almost 82 per cent. But this did not occur until April, 1864. In July, 1862, when a premium is said to have been paid for cents, the average value of paper dollars was 86.6 cents in gold, and the metal in 100 nickel cents was worth at most about 63½ cents in paper. If men were ready to pay a premium for cents, then it must have been because of their anxiety to procure a part of the insufficient supply for use as small change—not because they could make a profit by melting or exporting the coins.

This need for one cent pieces continued to be felt even after the issue of the postage and fractional currency, for the lowest

¹ *Report*, p. 188.

² *Ibid.*, p. 189, and letter of the Director of the Mint to Chase, March 16, 1864, in *Congressional Globe*, Thirty-eighth Congress, first session, p. 1228.

³ 12 Statutes at Large, 550 and 13 Statutes, 211.

⁴ 12 Statutes at Large, 182, and 13 Statutes, 206.

denominations supplied were five and three cents respectively.¹ That the supply of cents was not sufficient to meet the demand is clear. Before suspension they were "considered redundant in quantity," according to the director of the mint, and it "was part of the hourly finesse of buyers and sellers to get rid of them."² Although 116 millions of the nickel coins had been issued by June 30, 1862 and 48 millions more were added during the next year, the supply was still so short in comparison with the demand that not less than 300 varieties of illegal cent tokens of the same size, but less weight than the mint cent and containing no nickel, were issued by private parties in direct violation of the law and "until suppressed were freely used as coin by the public."³ Since the supply was thus deficient it is perhaps not surprising that business houses were willing to pay a slight premium for their small change.

As the amount of cents called for continued to be so great and as nickel was a costly ingredient, the director of the mint proposed in October, 1863 to substitute bronze for the alloy of nickel and copper. ⁴No action was taken upon this recommendation at the time, and on March 2, 1864, he wrote a letter to Secretary Chase, calling attention again to the subject.

This change in the material of the cent . . . [he said] has become a necessity from the advance[d] price of nickel (for a supply of which we are at present entirely dependent upon the foreign market, paying for it in gold or its equivalent), and the great uncertainty of procuring an adequate supply for the future from any source at a price within the legal limit, . . . if nickel is retained it will be impossible to meet the enormous demand for cents, and the increasing cost of production may compel a cessation of that coinage. The demand for cents is now far beyond our ability to supply it.⁵

Chase sent this letter with one of his own, supporting the director's recommendations, to Fessenden.⁶ When the proposal to drop nickel as an ingredient in the coinage became known it encountered serious opposition from the friends of Mr. Joseph

¹ KNOX, *United States Notes*, pp. 103 and 104.

³ *Ibid.*, *loc. cit.*

² *Report of 1863*, p. 189.

⁴ *Ibid.*, *loc. cit.*

⁵ *Congressional Globe*, Thirty-eighth Congress, first session, p. 1228.

⁶ *Ibid.*, p. 1227.

Wharton, from whose works in Pennsylvania and New Jersey came the entire domestic supply.¹ To remove their objections Mr. Pollock, the director, wrote a second letter March 16, recommending as a compromise that the old alloy of 88 per cent. copper and 12 per cent. nickel be retained, but that the weight of the cent be reduced from 72 to 48 grains.² Mr. Clark, from the Senate finance committee, however, brought in a bill for a bronze cent of 48 grains and a two-cent piece of the same composition, but twice the weight.³ This measure was at once passed by the Senate⁴ and a month later by the House after very brief discussion.⁵

In October the director of the mint reported that the new coinage law had been "highly successful." "The demand for the one and two-cent pieces," he added, "has been unprecedented, and every effort has been made to meet it." In explaining why the demand continued in excess of the supply despite daily issues largely in excess of any former period, he said,

Large quantities are hoarded and thus kept from circulation. They have also been bought and sold by small brokers at a premium. This has induced individuals to collect them for the purpose of sale, thus producing a scarcity and inconvenience to the public that ought not to exist.⁶

The letters of Mr. Pollock to Secretary Chase and these remarks in the October report indicate that the time had at last come when the bullion value of nickel cents was approximating their nominal value as currency. Indeed, as early as March, 1864, Lyman Trumbull, of Illinois, remarked in the Senate,

¹ Mr. Wharton himself prepared a little pamphlet, *Project for Reorganizing the Small Coinage of the United States of America*, in which he offered to provide all the nickel that would be necessary for making not only one and two-cent pieces, but also other coins less than 25 cents at \$2.50 per pound. At this price he estimated that one and two-cent pieces could be made at a profit of 33½ per cent. to the government. The pamphlet bears the date April 15, 1864.

² *Congressional Globe*, Thirty-eighth Congress, first session, p. 1228.

³ *Ibid.*, p. 1227.

⁴ *Ibid.*, p. 1228.

⁵ *Ibid.*, p. 1763. Act of April 22, 1864. 13 Statutes at Large, 54.

⁶ *Report*, October, 1864, p. 213.

The cent as a general thing does not circulate in the country now, I think. We see some few of them here, but in my travels I very seldom see a cent. I do not know how it may be in other portions of the country.¹

At this time, March 21st, gold was at 162 and paper was accordingly worth 61.7 in specie. If cents were being hoarded it must have been because the advance in the price of nickel, of which Mr. Pollock complained, had carried the bullion value of 100 coins above 62 cents in gold. But whether there was a profit in melting or exporting the minor coins in March, 1864, there apparently was one in June and the following months. The monthly average price of gold was above 200 from June until February of the next year inclusive. During this period the average specie value of paper dollars varied from 38.7 cents in July to 48.7 cents in February. Even had there been no advance in the gold price of nickel there would have been a margin of profit in collecting coins which would pass current as money at a gold equivalent of considerably less than 50 cents, but could be sold as bullion for perhaps 55 or more. Consequently, it is not improbable that some of the brokers who bought nickel cents at a premium in the summer of 1864 purchased them to melt or export, not to sell again for change. On the other hand it should be pointed out that the expense of collecting and handling one cent pieces would be much greater in proportion to their bullion value than in the case of silver coins.

The situation was of course somewhat different with the cents struck under the new coinage law. These contained no nickel and weighed but two-thirds as much as the previous issues. During the fiscal year 1865 the government made a profit of about \$400,000 from their manufacture.² If any premium was paid for them it must consequently have been from the desire for change. As the nickel cents appear, from what Senator Trumbull and the director say, to have gone out of circulation in large measure, the scarcity of change less than three cents—the smallest fractional note—must have been severe. Of the bronze

¹ *Congressional Globe*, Thirty-eighth Congress, first session, p. 1227.

² *Report of the Director of the Mint*, September, 1865, p. 232.

cents 5,874,000 were struck before July 1st and of the two-cent pieces 1,822,500.¹ Though the coinage during the fiscal year 1865 was very rapid—an average of $2\frac{1}{4}$ million two-cent pieces and $4\frac{1}{2}$ million cents each month²—the supply could not have been sufficient to meet the demand.

One more change was made in the circulation of minor coins before the end of the war. From a price of 226 the last day of 1864 gold fell to 200 by the 1st of March, and the rapid progress of the northern armies then promised a still further fall, which was realized in April and May, when the average price was 148.5 and 135.6 respectively. This fall in gold or rise of paper money seemed to show that the day was close at hand when minor coins would remain in circulation without difficulty.³ Accordingly a bill was passed without discussion by Congress,⁴ authorizing the issue of a three-cent piece, made of copper and nickel, in the proportion of 75 parts of the first and 25 parts of the second. This coin was to be legal tender in payments of 60 cents, and the one and two-cent pieces in payments of four cents. At the same time it was provided that thereafter no fractional notes should be issued of denominations less than five cents, and that any such notes outstanding should be destroyed when paid into the treasury.⁵

When the director of the mint prepared his report at the end of September, 1865, he made no further complaints about the premium on minor coins. Paper dollars had then a value of more than 69 cents in gold, and even the three-cent pieces, containing 25 per cent. of nickel, seemed to have been worth more

¹ No separate statement is made by the director of the mint of the coinage of nickel and bronze cents in the fiscal year of 1864, but the above figures are obtained by subtracting from the total coinage of cents up to June 30, 1864, the total number of copper and nickel cents struck as given in *Coinage Laws of the United States 1792, 1894, 4th ed. p. 89.*

² *Report of the Director of the Mint*, September 1865, p. 235.

³ *Hunt's Merchant's Magazine* for May, 1865, includes "coppers" in its statement of "the active circulation of the country, Vol. LII, p. 381.

⁴ *Congressional Globe*, Thirty-eighth Congress, second session, pp. 1391 and 1403.

⁵ Act of March 3, 1865. 13 Statutes at Large, 517.

as currency than as bullion. "The coinage of the cent and the two-cent piece from the bronze alloy," he said, "has been very large, but not in excess of the demand. They have been distributed to almost every part of the United States, and many into states, West and South, that heretofore refused to use such coin as currency."¹ He closed by suggesting that the policy pursued in issuing a three-cent piece be followed further by making five-cent coins also of 25 per cent. nickel, and that, to make room for their circulation, all fractional notes below ten cents be withdrawn.

VI.

TREASURY NOTES.

As was said above, the first greenbacks were issued early in April, 1862. From this time on until specie payments were resumed, January 1, 1879, they served as the standard of value in all business transactions and also as an important part of the circulating medium. 98.6 millions were issued before July 1, 1862. From this time on for two years the government was paying out large sums in these notes, but was also redeeming those paid in to it and then reissuing them. During the next fiscal year the issues were 291.3 millions as compared with the redemptions of 2.1 millions; during 1864, 86.4, as compared with 42.6, and during 1865, 4.2, as compared with 4.3. This left 431 millions outstanding at the close of the war.² The greenbacks served as a medium of exchange, not only in large, but also in small transactions, for while the first act provided that \$5 should be the lowest denomination, the second and third permitted any denomination not less than a dollar. The amount of the several denominations in use is indicated by the following table.

But the greenbacks were by no means the only form of government obligations employed as currency. Three other sorts of treasury notes were made a legal tender to the same extent

¹ P. 232.

² BAYLEY, *National Loans of the United States*, p. 157. These statements differ slightly from those given year by year in the contemporaneous reports of the secretary of the treasury.

TABLE I.

United States notes of each denomination outstanding at the close of each fiscal year from 1862 to 1866.¹

(In millions of dollars.)

	1862.	1863.	1864.	1865.	1866.
One dollar.....	....	16.0	16.8	17.8	17.2
Two dollars.....	....	17.0	17.7	19.6	18.8
Five dollars.....	17.1	79.9	95.5	96.0	95.4
Ten dollars.....	15.4	90.0	108.7	109.5	109.0
Twenty dollars.....	15.0	74.9	86.6	86.1	85.1
Fifty dollars.....	13.0	23.0	29.9	29.7	29.3
One hundred dollars.....	13.0	30.8	34.2	33.8	33.3
Five hundred dollars.....	13.0	26.5	25.4	24.8	35.4
One thousand dollars.....	10.0	29.5	37.1	35.8	57.1
Total.....	96.6	387.6	451.9	453.1	480.7
Denomination unknown, in reserve.....	....	...	4.6	22.0	79.9
Net.....	96.6	387.6	447.3	431.1	400.8

as United States notes, but differed from the latter in that they bore interest. The third legal tender act, approved March 3, 1863, authorized the issue of \$400,000,000 treasury notes, bearing not more than 6 per cent. interest, redeemable in not more than three years, and a legal tender for their face value, excluding interest.² Under this act Mr. Chase issued 166.5 millions of two-year 5 per cent. notes between July 1, 1863, and June 30, 1864, and 44.5 millions of one year 5 per cent. notes between January 1 and June 30, 1864.³

How far these notes were employed as currency is altogether uncertain. It was apparently the expectation of the treasury that banks and capitalists into whose hands they came would retain the notes to secure the interest. This would probably have happened very generally had the interest been paid only at maturity. But when, in the autumn of 1863, Mr. Chase borrowed money for paying the troops from the banks, to be repaid in 5 per cent. notes, the banks stipulated that the notes given

¹ *Report of the Secretary of the Treasury*, December, 1896, p. 62.

² § 2. 12 Statutes at Large, 710.

³ BAYLEY, *op. cit.*, p. 161.

them should bear half-yearly interest coupons.¹ One hundred and fifty of the 166.5 millions of two-year notes issued were of this form.² They were found in practice to be a most unsatisfactory form of currency. After Secretary Chase had ruled that the interest coupons must be detached in the presence of an officer of the treasury or of a national bank,³ the notes were usually paid out with no regard to the interest until the date on which the next coupon was payable approached, then hoarded for a time, and as soon as the interest had been collected once more thrown into circulation.⁴ This tended, of course, to cause periodical expansions and contractions of the currency embarrassing alike to the business public and to the treasury. Their circulation was also rendered irregular by fluctuations in the current rates of interest on short-time loans in the New York market. When money was at 5 per cent. or less men found it advantageous to retain the government notes in their own hands; but when the rates rose to 7 or 8 few would choose to keep their funds in a short-time 5 per cent. security.⁵

Appreciating these evils, Mr. Chase and Mr. Fessenden, who succeeded him as secretary of the treasury on the 5th of July, 1864, determined to withdraw the coupon notes as rapidly as possible. Before December Secretary Fessenden reported that about 90 of the 150 millions issued had been retired.⁶ Their place was occupied by another form of interest-bearing legal tender treasury notes issued under the authority of the acts of March 3, 1863, and June 30, 1864.⁷ The new notes ran three years and bore interest at 6 per cent., compounded half yearly, but payable only at maturity. Some 17 millions were issued

¹ *Hunt's Merchants' Magazine*, Vol. L, p. 455.

² *Report of the Treasurer*, November, 1864, p. 75.

³ *Hunt's Merchants' Magazine*, Vol. L, p. 455.

⁴ *Report of the Secretary of the Treasury*, 1864, p. 18; *Hunt's Merchants' Magazine*, Vol. L, pp. 215, 216, and Vol. LI, p. 447.

⁵ *Hunt's Merchants' Magazine*, Vol. L, pp. 215 and 455.

⁶ *Report*, p. 18. Cf. Chase's letter of April 17, 1865, to Colonel J. D. Van Buren, in Schuckers' *Life*, p. 413.

⁷ 12 Statutes at Large, 710, and 13 Statutes, 218. Cf. BAYLEY, p. 84.

before the close of the fiscal year 1864 and 180 millions during the next year.¹ These issues were called compound interest notes. They were commonly regarded as the least injurious form of treasury notes devised during the war because of the inducement which the compound interest gave for keeping them as an investment.² Of course this inducement became stronger the longer the note had been issued. Thus a \$10 note—the smallest denomination—was worth \$10.60 at the end of the first year, \$11.25 at the end of the second, and \$11.94 at the end of the third. Anyone who paid the note away at the end of the first year would therefore lose 60 cents, at the end of the second \$1.25, and at the end of the third \$1.94.

Nevertheless the compound interest notes served to increase the currency inflation to an uncertain extent, both directly and indirectly. The comptroller of the currency thought that in October, 1865, perhaps 10 millions of these notes were in actual circulation as money,³ and in December the secretary of the treasury thought it was "safe to estimate" that 30 millions of the one and two-year notes of 1863 and the compound interest notes together were so used.⁴ Perhaps the indirect use was really more important. This was found in practice of banks of holding compound interest notes as reserves in place of greenbacks that bore no interest. The comptroller of the currency stated that the amount held by national banks October 2, 1865, was 74¼ millions.⁵ Similar use was made of the one and two-year 5 per cent. notes left outstanding.⁶ In so far as interest bearing legal tender notes were kept in this fashion they set free greenbacks for circulation among individuals.

¹ BAYLEY, p. 163. The form of these notes is given by Knox, p. 111.

² *Report of the Secretary of the Treasury*, 1864, p. 18.

³ *House of Representatives Executive Document No. 4*, p. 5, Thirty-ninth Congress, first session.

⁴ *Report*, p. 9.

⁵ See reference in note 2. They were not, however, a legal tender in payment of bank notes. 13 Statutes at Large, 219.

⁶ *Bankers' Magazine*, Vol. XVIII, p. 827; *Hunt's Merchants' Magazine*, Vol. XLIX, p. 384.

The list of government obligations employed as currency is not yet complete. Two other forms, although not a legal tender, were used as a circulating medium. The issue of certificates of indebtedness, bearing interest at 6 per cent. and payable in one year, had been authorized without limitation of amount by the Act of March 1, 1862.¹ This method of postponing claims which they had not the funds to meet at once was availed of on a large scale by the secretaries of the treasury during the entire war. Fifty millions of such certificates were issued in the fiscal year 1862, 157 millions in 1863, 169 millions in 1864, and 131 millions in 1865.² Most of these notes were paid out to contractors and by them used either as collateral for procuring bank loans or directly as currency. Much of the time they were sold at a small discount, but despite this they passed freely from hand to hand as current funds.³

Similar use was made of the "seven-thirties." This was the name given to the three-year treasury notes bearing 7.3 per cent. interest issued under the acts of July 17, 1861; June 30, 1864, and March 3, 1865.⁴ Interest on notes issued under the first of these laws was paid in gold, but the second and third issues were payable, principal and interest, in lawful money. In the summer and autumn of 1864 Secretary Fessenden offered 7:30 notes of the second issue in small denominations to army officers and soldiers in payment of their wages. Over 20 millions were thus paid out in place of greenbacks.⁵ In December, 1865, Secretary McCulloch reported that many of these small denominations were in circulation as money.⁶

¹ 12 Statutes at Large, 352. ² BAYLEY, p. 159.

³ Compare *Hunt's Merchants' Magazine*, Vol. LII, p. 382.

⁴ 12 Statutes at Large, 259; 13 Statutes, 218 and 468.

⁵ *Report of the Secretary of the Treasury*, 1864, p. 21.

⁶ *Report*, 1865, p. 9. Under the act of June 30, 1864, it was provided that such of the notes as should be made payable principal and interest at maturity should be a legal tender (13 Statutes at Large, 218). As, however, the secretary preferred to attach interest coupons of which only the last was payable with the note at maturity, they did not possess this property. Cf. *W. F. De Knight, History of the Currency of the Country and of the Loans of the United States* (Treasury Department Document No. 1943), 1897, p. 96 and form of the 7:30's as given on the following pages.

VII.

RECAPITULATION.

Perhaps the clearest view of the confused state of the monetary circulation of the United States during the Civil War can be obtained from a summary statement of the various coins,

TABLE II.

Currency of the United States at the close of each fiscal year from 1860 to 1866.

(In millions of dollars.)

	1860	1861	1862	1863	1864	1865	1866
I. <i>Specie</i> : ¹							
1. Gold coins	184.6	245.3	22.0	22.0	22.0	22.0	22.0
2. Silver dollars							
3. Subsidiary silver	39.6	42.2	3.0	3.0	3.0	3.0	3.0
4. Minor coins . . . . .	.9	1.0	1.2	1.6	2.1	3.3	3.9
II. <i>Postage and fractional currency</i> : ²							
1. Postage currency				20.2	15.2	9.9	7.0
2. Fractional currency					7.7	15.1	20.0
III. <i>Non-interest bearing, legal tender, treasury notes</i> :							
1. Old demand notes ²			53.0	3.4	.8	.5	.3
2. Greenbacks ³			96.6	387.6	447.3	431.1	400.8
IV. <i>Bank notes</i> : ⁴							
1. Notes of state banks	207.1	202.0	183.8	238.7	179.2	142.9	20.0
2. " " national "					31.2	146.1	281.5
V. <i>Interest bearing, legal tender treasury notes</i> : ²							
1. One year, 5 per cent, treasury notes of 1863					44.5	} 42.3	} 3.5
2. Two-year, 5 per cent, treasury notes of 1863					109.0		
3. Compound interest notes					15.0	193.8	159.0
VI. <i>Government obligations not a legal tender</i> : ²							
1. Certificates of indebtedness			49.9	156.8	160.7	115.8	26.4
2. 7 : 30 treasury notes of 1864						234.4	} 806.3
3. 7 : 30 treasury notes of 1865						437.2	
VII. <i>Coin, bullion, and paper money in the Treasury</i> : ⁵	6.7	3.6	23.8	79.5	35.9	55.4	80.8

¹ See explanations in text below.

² Compiled from the annual *Reports of the Secretary of the Treasury*.

³ See Table I.

⁴ *Statistical Abstract of the United States*, 1878, p. 14.

⁵ *Information Respecting U. S. Bonds, Paper Currency, Coin*, etc. (Revised Ed. Treasury Department Circular No. 123, July 1, 1896), p. 52.

government obligations used as currency, and bank notes outstanding at the close of the several fiscal years, so far as this is ascertainable. Such a statement is presented on the preceding page with a few explanatory notes.

This table is intended rather as an indication of the various kinds of currency in use than as a quantitative statement of the circulating medium. Few of the items can be regarded as showing with any degree of definiteness amounts in use as money. The specie circulation, for example, is computed on the basis of the statistics of coinage and the director of the mint's estimate that in 1861 there were from 275 to 300 millions of specie in the country and that in 1862 there were 45 millions of silver coinage.¹ A different result would have been reached had Mr. Chase's guess at the amount of coin been taken in place of the director's.² Of course the coins put down as circulating after 1862 were used only on the Pacific coast. The common guess is that about 25 millions were employed there, and this sum has been divided between gold and subsidiary silver again by guesswork.³ The figures for the minor coins show the amounts struck under the acts of 1857 and the laws of 1864, 1865 and 1866, as given in the current reports of the director of mint. But, as has been shown, it is probable that a considerable part of these coins were withdrawn from circulation at least during the summer, autumn and winter of 1864. On the other hand some of the old copper cents made before 1857 remained still in circulation in 1862 and large amounts of cent tokens were privately issued in 1863.

The figures for the postage and fractional currency are drawn from the public debt statements of the annual reports of the secretary of the treasury. They are subject to a considerable but indefinite error, particularly in the later years, on

¹ *Report of 1861*, p. 62; *Report, 1862*, p. 49.

² Chase made the coin of the loyal states November 1, 1861, not less than \$210,000,000. (*Report, 1862*, p. 13.) The Director of the Mint made this same sum somewhere between 255 and 280 millions. See note 1.

³ *Cf. Information Respecting United States Bonds, Paper Currency, Coin, etc.* (Revised Ed. Treasury Department Circular No. 123, July 1, 1896), p. 52, note 1.

account of the large number of these little notes lost and destroyed. It must also be remembered that the place in the currency which they were intended to fill was largely occupied from July, 1862, to perhaps February or March, 1863, by shin-plasters and postage stamps.

The next four items in the table are less uncertain. It is well ascertained that the old demand notes were not commonly used as currency after May, 1862. From that time on they were seldom paid out except as a substitute for gold at the customs houses. The circulation of greenbacks during the war, however, is subject to small doubts although different official documents do not give precisely identical figures, and the same is true of the notes of state and national banks.

In the next two divisions—interest-bearing government obligations which were and which were not a legal tender—the amount outstanding is stated with accuracy by the register of the treasury, but no reliable estimate can be made of the amount of these securities that was in actual use as currency at the different dates.

Statements of the amount of the monetary circulation of the United States during the Civil War have been published from time to time in official documents and frequently accepted uncritically as the basis of argument in currency discussions.¹ The preceding review of the situation, indefinite and tedious as it is, has at least the negative merit of showing that such statements are subject to a much wider margin of error than is commonly the case—and few would be found to claim a high degree of accuracy for statements of this sort under the most favorable circumstances. To cast up the totals of the above table would be not only useless, but positively misleading, because several of the items are mere guesses and in the case of others where the amounts are reasonably certain not all of the sums set down were in use at any time as currency. Nor could any estimate

¹ See for example the *Statistical Abstract* for 1878, p. 14, and the circular of the Treasury Department referred to above.

be made on the basis of the totals that would command confidence. But while the amount of currency in circulation is not and cannot be known, it is evident from the discussion that not least among the unhappy consequences of the legal tender acts was to throw the circulating medium into disorder and cause much inconvenience to the business public. The more serious effects of unsettling the standard of value remain to be discussed elsewhere.

WESLEY C. MITCHELL.

UNIVERSITY OF CHICAGO.