

The New York Clearing House

**1853–1913. A private government among banks, tested by
crisis and succeeded by law.**

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Preface: The private room and the public function

On the night of October 21, 1907, a small group of bankers assembled at J. P. Morgan's library on Madison Avenue and, at Morgan's direction, sent an overnight examining team into the Knickerbocker Trust Company to decide whether the institution should open its

doors in the morning. Knickerbocker was one of the largest trusts in the city, but it was not a member of the New York Clearing House, and the member bank that had been clearing its checks had just announced that it would do so no longer. The examination that night was Morgan's own operation, not a formal organ of the association: Benjamin Strong, then a Bankers Trust officer working under Morgan's direction, led the inspection, and the group Morgan convened weighed what could be learned in the hours available and declined to stand behind the company. By the following afternoon Knickerbocker had paid roughly eight million dollars across its counters and shut its doors; within a month its president had taken his own life. No statute had appointed the men in the library, and no public officer reviewed their judgment. Private authority, exercised outside the Clearing House Association's rolls and outside any public review, had settled the fate of a financial institution the public used every day. Where the association's authority ended and Morgan's began became the central jurisdictional question of 1907.

Knickerbocker had never joined the Clearing House or submitted to the examination and discipline that membership required, and the associated banks had made no promise to protect it. But the boundary's consequences did not stop at the rolls: the failure spread fear through institutions that had no vote in the association's room, and the restriction of cash that followed reached towns whose bankers the members had never met. An association without a charter or a public superior had acquired the capacity to protect institutions inside its compact while its decisions affected depositors and banks far outside it; a private banker beyond the compact could invoke that same boundary to withhold protection.

The New York Clearing House had begun with a narrower purpose. In the autumn of 1853, fifty-two banks weary of sending porters through the streets with satchels of coin agreed to clear their mutual claims in one room. Net settlement removed most of the gold from the streets and contracted a scattered week of exchanges into a single morning. It also made the banks into a body capable of examining members, pooling reserves, lending through collective agreement, and coordinating a suspension of cash payments. Because the correspondent system concentrated much of the interior's reserve in New York, decisions taken inside this one city association carried national consequences.

The evidence is uneven. The association's constitution and published rules survive, as do official reports, contemporary accounts, and parts of the committee minutes, but the minute books have not been reproduced in full. James Graham Cannon, the fullest printed witness, was an officer of a member bank and the association's own historian. O. M. W. Sprague and the Comptroller of the Currency wrote from outside the membership; the Pujo committee wrote to investigate concentrated power; modern scholars have reconstructed particular episodes from surviving committee minutes. The constitution, resolutions, and balance-sheet evidence establish some claims outright; motive and intention can only be inferred, and inference is marked as inference wherever it appears.

Three kinds of paper run through the story. Gold certificates represented coin already deposited; loan certificates transferred collateralized credit among members under a collective rule; cashier's checks and other emergency media reached the public during suspension.

Confuse them, and the mere presence of paper seems to prove that the Clearing House issued money as a proto-central bank. The same distinction runs through ordinary settlement and membership discipline, successive experiments in emergency lending, reserve pooling, and information control, and the statutory reform of 1913.

“Government” is used here in an institutional rather than a sovereign sense. The Clearing House could make binding rules for members, delegate judgment, gather information, impose penalties, and coordinate collective action. It could not tax the public, compel non-members, or claim a territorial jurisdiction. Its authority was real because members depended on the settlement and had promised obedience; its limit was real because that promise ended at the rolls.

The associated banks built a working government among banks: one that could redistribute member reserves, authorize interbank credit, examine institutions, and manage information during a panic. To call that a bookkeeping convenience understates its capacity; to call it the Federal Reserve in embryo overstates its jurisdiction. Its powers arose from member agreement, protected members, and stopped at the membership boundary even when their consequences did not. The reform of 1913 did not simply enlarge the compact or hand it wholesale to public control. It created a statutory hybrid: member-capitalized regional Reserve Banks operating under a nationally appointed board, with broader reach and stronger public accountability than any private association could supply. The Clearing House has to be measured against both halves of that transition, the capacity its compact produced and the limit the compact could not cross.

Emergency authority grew out of the ordinary obligation to close each day, and a certificate worked only among banks already bound to accept it, so settlement and membership come before the instruments they made possible. The crises then test the same machinery under different sources of pressure: local fraud, foreign shock, national withdrawal, and trust-company runs. The endpoint is the statute of 1913, not the mature Federal Reserve of later decades; later powers are not read back into the original design.

Part I: A government among banks

Chapter 1. From porters to settlement

Before there was a clearing house there were porters carrying checks and coin from bank to bank. Every New York bank ended the day with claims on many others, and each claim had to be presented at the drawee’s counter. The system worked, but only by putting gold, labor, and unsettled credit into the streets. The Clearing House changed all three when the banks stopped settling one pair at a time and began to settle together.

Until 1853 the exchange was bilateral. Each bank presented its claims separately to every other bank and paid the claims presented against it, so a city of fifty banks generated a web in which each institution stood as debtor and creditor by turns. Gibbons, writing from within the New York banks, described a daily traffic of porters moving with checks and specie and

a weekly reckoning at which the accumulated balances were squared in coin.¹ Cleaveland treated the arrangement as the cumbersome consequence of specie-redemption law without any common mechanism for interbank collection.² Paper moved one way and coin the other, between every pair of banks.

Specie had to be counted, carried, and guarded through crowded streets. Gibbons recalled porters waiting at rival counters, errors creeping into a piecemeal reckoning, and coin moving whether or not the week's exchanges had been struck correctly.³ Delay was as costly as weight: until the weekly reckoning, a bank could only estimate its true position from claims scattered across the city in its porters' hands.

The weekly interval also created an unchosen credit exposure. A bank holding a neighbor's paper waited days to turn it into coin; if the neighbor failed first, the loss fell on the banks carrying its unsettled claims.⁴ Growth amplified the defect. Every new bank added not one relationship but relationships with all existing banks, so bilateral work grew faster than the number of institutions,⁵ and Cannon described a volume of exchange the porter system could no longer carry comfortably.⁶ A common settlement was becoming necessary, not merely convenient.

The solution the banks adopted in 1853 was borrowed in principle and improvised in detail. New York had before it the example of the London Clearing House, where the banks of the City had long settled their mutual claims in a single room rather than across the counters of the whole town, and the New York plan took from London the idea of a common settlement while working out for itself the machinery a different market required. Cannon credited the plan to bankers who had studied the London practice and pressed it on a profession weary of the porter system, and recorded that fifty-two banks associated themselves under a constitution and began to clear their exchanges in common in the autumn of 1853.⁷ Cleaveland, writing within a few years of the founding, described the new body as an arrangement the banks had entered voluntarily, without a charter and without any authority from the legislature, binding themselves to one another by their own compact rather than by any public act.⁸ The association was, from its first day, a private agreement doing a public kind of work. The fifty-two banks kept their separate charters and separate owners; no legislature combined them or commanded them to clear. They created the association by signing a common constitution and by returning to the room each day, so that its authority accumulated through repeated performance rather than through grant.

The room itself expressed the logic of the new settlement. The banks brought their exchanges to one place at one hour, and the clerks of every member met the clerks of every other,

¹Gibbons 1858, 292–301.

²Cleaveland 1857, 168–176.

³Gibbons 1858, 292–310.

⁴Gibbons 1858, 305–315; Cleaveland 1857, 168–176.

⁵Cleaveland 1857, 160–176.

⁶Cannon 1900, 130–138.

⁷Cannon 1900, 138–145.

⁸Cleaveland 1857, 176–184.

so that traffic once spread through the streets was gathered into a single hall. Cannon described desks ranged around the room, delivery made simultaneously rather than serially, and a manager presiding as the association's officer, charged with striking the balances and receiving the payments.⁹ Gibbons, watching the settlement in the years just after it began, described the members' clerks assembling at the appointed hour and the exchanges passing in a few concentrated minutes that replaced a day of walking; the whole business of the city's banks transacted in one room before noon.¹⁰ The porters did not vanish, but their work changed: a bank's clerk now carried its exchanges to the one room, and the coin that had moved through the streets between fifty pairs of banks now moved, in far smaller quantity, between the members and the manager at a single settlement.

The daily mechanism substituted one net payment for many gross ones. Each morning members delivered the checks and drafts they held against one another; the manager's staff offset every member's claims against the claims on it and struck one balance; debtors paid that balance to the manager, and the manager paid the creditors.¹¹

Gross exchange	Clearing-house netting	Final settlement
Each bank presents claims on many other banks.	All mutual claims are offset in one set of books.	Each member pays or receives one net balance.

Cannon reported an average of nearly nineteen million dollars in daily exchanges during the first year, while only the much smaller net balances moved in coin.¹² Consider three banks: if A owed B one million dollars, B owed C eight hundred thousand, and C owed A seven hundred thousand, gross settlement would move two and a half million dollars across three relationships. Netting would leave A owing three hundred thousand, B receiving two hundred thousand, and C receiving one hundred thousand. The same legal claims were honored, but only four hundred thousand dollars actually moved. The saving rose with the volume of business, because a larger field of claims created more opportunities for cancellation.

The fixed hour of settlement carried a discipline the old exchange had never imposed, and that discipline would ripen, in the years that followed, into examinations, fines, and the power to expel. A member that owed a net balance had to pay it to the manager by an appointed time in the early afternoon, and a member that could not pay by the hour was a member the whole association knew about at once, because the settlement did not close until every balance was paid. Cannon described the manager's office as the point at which the association's collective knowledge of its members was concentrated: a bank's difficulty, once hidden among scattered creditors for a week, was now visible in a single room at a single hour, and became the concern of every member together.¹³ A bank knew that

⁹Cannon 1900, 145–154.

¹⁰Gibbons 1858, 315–324.

¹¹Cannon 1900, 154–165.

¹²Cannon 1900, 138–141.

¹³Cannon 1900, 154–165.

chronic lateness, calculation errors, or dependence on last-minute funds would be observed by the same institutions whose paper it received and whose confidence it needed; formal examinations later extended that surveillance into the books, but the daily demand to appear, exchange, and settle on time was where it began.

The manager's role was at once narrow and important. He received debtor balances, distributed what had actually been received, directed clerks, and kept the settlement moving; the constitution did not make the association generally liable for member obligations. Operational centralization thus preceded financial mutualization: the room could calculate and transmit a common result without yet promising that members would support a bank unable to pay it. Crisis would force the association to decide whether, and on what terms, that second step should follow the first.

Settlement made the banks into a body. They were now bound by a constitution, dependent on a common room, and subject to decisions none could make alone; Cleaveland described the novelty as a combination formed without legislative sanction that nevertheless governed the members' mutual business.¹⁴ The manager and committees who set the hour, struck balances, demanded payment, and responded to default acted under rules the banks had adopted themselves: authority private and contractual, but real within its boundary. A failure to meet one bilateral claim had once concerned a single creditor; a failure to meet the clearing balance now became visible to the whole membership at a fixed hour, and the manager possessed information no scattered creditor had possessed. Common settlement generated common surveillance, and from surveillance followed the rules of admission, examination, and default: powers not contemplated when the porters first entered the room, but made necessary once every member depended on the same daily close. Because members practiced these relationships every business day rather than only in an emergency, an extraordinary crisis vote could later be executed through channels already worn smooth by routine; the association's emergency capacity grew along the grain of a daily institution built for a far less dramatic purpose.

The panic of 1857 would expose that latent capacity before the association possessed a mature instrument for using it. The banks had learned to see one another's balances and to meet as a body, but they had not yet settled the terms of collective lending or reserve support. The decade after founding was not a straight line from porter room to central-bank substitute; the banks had built a body whose crisis powers still had to be invented clause by clause.

Chapter 2. Membership, discipline, and exclusion

The New York Clearing House held no charter. Its authority arose from the banks' agreement to settle together and from the rules needed to make that agreement reliable. Those rules governed admission, examination, daily conduct, suspension, and expulsion. Contractual in form, they gave the association a governmental effect within its membership. That authority reached over members who accepted it, and over institutions outside the rolls that nevertheless felt its decisions.

¹⁴Cleaveland 1857, 176–188.

The banks had adopted a first constitution on June 6, 1854, put into force that August 1.¹⁵ The fuller, more mechanical picture of admission, discipline, and fines comes from the association's 1898 constitution as printed for its members, together with an 1884 amendment. What the 1854 charter shared with the 1898 rules cannot be assumed; each document speaks for its own years.

The 1898 constitution established a Clearing House Committee, empowered it to supervise operations and examine any member when the association's interest required, prescribed admission and expulsion votes, required weekly statements, regulated clearing for non-members, and appended a scale of fines.¹⁶ It also set an ordinary politics: one vote per bank, a majority of the membership for a quorum, a special meeting on the demand of seven banks, annual election of officers and committees, and a defined process for amendment and withdrawal. A manager directed the clerks and the physical settlement, while committees handled admission, arbitration, conference, and supervision. By 1898 the compact had grown offices, procedures, and continuity that a single settlement agreement did not require.

Admission was never automatic. The 1898 constitution referred applications to a five-officer admissions committee, required a three-fourths ballot of members present, and allowed the association to impose whatever conditions it considered expedient.¹⁷ The printed text sets no general minimum-capital threshold; entry depended instead on examination and the judgment of the existing members, who decided which competitors would receive direct access to the common settlement, without public criteria, stated reasons for rejection, or an internal appeal. Jaremski's comparative evidence shows the consequence: crisis protection followed membership, and banks outside the roll bore risks members were spared.¹⁸

Once admitted, a member faced scrutiny ordinary correspondent banking did not impose. An 1884 amendment empowered the Clearing House Committee to examine any member whenever it considered an examination to be in the association's interest, and to demand securities sufficient to protect settlement balances.¹⁹ Gorton and Mullineaux, treating the association as an instance of endogenous regulation, describe the effect precisely: the clearing house internalized informational externalities that ordinary correspondent banking left dispersed, producing a private regulatory good no individual bank had an incentive to produce alone.²⁰ The committee could require assets of whatever amount and character it judged sufficient, so a weak member faced a choice between satisfying its competitors' committee or risking the privileges daily operation depended on.

Fines supplied the ordinary discipline, penalizing late delivery, errors, and failures that delayed settlement.²¹ Graver sanctions stood above them: the 1898 constitution permitted

¹⁵Cannon 1900; the association's first constitution was drafted by George Curtis and adopted June 6, 1854, taking full effect on August 1 of that year.

¹⁶New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

¹⁷Cannon 1910a, 24–31.

¹⁸Jaremski 2018, 437–441.

¹⁹New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

²⁰Gorton and Mullineaux 1987, 457–468.

²¹Cannon 1910a, 52–60.

expulsion for cause on a majority vote of the whole association, and allowed two committees, acting unanimously with the required attendance, to suspend a member during an extreme emergency pending a general meeting.²² Loss of clearing privileges threatened both operations and reputation, which made suspension or expulsion far more serious than a monetary penalty. The 1898 text also fixed what happened when a member failed to meet its daily balance: the banks that had exchanged with the defaulter supplied the missing amount in proportion to their claims so the general settlement could close, and those payments became claims against the defaulting bank.²³ Daily discipline and mutual exposure were joined by the same rule: prompt payment protected the group, and the default provision kept one failure from stopping settlement for everyone else. A standing committee could also hear disputes between a member and another party and record a decision, supplying a forum without converting the association into a court of general jurisdiction.²⁴

Publicity was a further discipline. Section 16 of the 1898 constitution required every member to furnish a weekly statement of loans, specie, legal tenders, circulation, and deposits for publication, and Cannon treated the requirement as an incentive to maintain reserves because weakness would be seen.²⁵ In 1907 the association would reverse the practice and publish only aggregate figures: disclosure and its opposite depended on the same control over member information, exercised through a private compact the 1898 text nowhere describes as a public duty.

In a panic the membership could authorize loan certificates, pool reserves, and coordinate restrictions on cash payments: collective powers no single member possessed, and ones whose effects, Pujo's investigators would later stress, reached the country's chief money market.²⁶ These powers did not rest on a standing public mandate. Members adopted crisis resolutions under the general machinery of their compact and delegated execution to committees, so a vote could bind every member even when its consequences traveled far beyond the constituency to which the authority answered.

Non-members could use the settlement only through a member acting as clearing agent; Section 25 made the sponsoring member responsible for those exchanges and subject to association approval.²⁷ The client gained access to settlement, not membership or an independent claim on collective support, and the sponsoring member could withdraw the relationship at will: the legal and operational form Knickerbocker occupied in 1907. No group felt the marginal position more sharply than the trust companies. They had grown by 1907 into large holders of deposits, cleared through member banks as agents rather than as members, submitted to no clearing-house examination, and held reserves well below what member banks were required to keep. Moen and Tallman's reconstruction shows how far the trusts' reserves lay beneath the members' own, and how large the trust sector had grown

²²New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

²³New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

²⁴New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

²⁵Cannon 1910a, 68–76.

²⁶Sprague 1910, 108–121; United States House Committee on Banking and Currency 1913, 148–160.

²⁷New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

while remaining outside the association's rules.²⁸ The association had pressed the trusts that cleared through its members to hold reserves closer to the members' standard; a number of trusts gave up the clearing arrangement rather than accept it. The choice looked reasonable in a calm market and proved disastrous in a panic.

Size mattered less through a single threshold than through the economics and discretion of admission: the 1898 fee schedule charged five thousand dollars to banks with capital up to five million and more above that, but still left the final decision to a supermajority.²⁹

The association governed its members by written rule and governed no one else. Non-members, trust companies, and agent-cleared banks lived within reach of its decisions and outside any assured claim to its protection. New York made that ordinary membership boundary unusually consequential, because its member banks held a large share of the nation's correspondent reserves. The crises between 1857 and 1907 tested what happened when authority stopped at the edge of the rolls and financial pressure did not.

Part II: The instrument

Chapter 3. Three kinds of paper

A loan certificate did not arrive as a public document, and it did not travel as money. It was written, at first, on a slip of paper handed across a table in a private room on Cedar Street. It carried an amount and the signatures of a clearing-house committee, and it entitled the receiving bank to settle the day's balance without producing gold, greenbacks, or currency. What the certificate was, and what it was not, decides what the New York Clearing House was doing in 1857, in 1873, and in 1907.

The historical literature has treated three instruments as if they belonged to one family. James Graham Cannon, the association's own contemporary historian, distinguished them in his 1910 statement to the National Monetary Commission in a particular order: the interbank loan certificate, issued by a clearing-house committee against collateral and used to satisfy a balance owed at daily settlement; the class of small-denomination emergency media that circulated among the public during the 1907 suspension, including bearer cashier's checks and local scrip; and the gold certificate, an ordinary receipt for coin deposited in the vaults of the association's depository.³⁰ Most of what has been written since has blurred that distinction; Cannon's ordering preserves it.

The interbank loan certificate was issued by a committee of the clearing house, at a member bank's request, on the security of approved collateral. It carried, as a standing feature, an interest rate of six percent, paid by the borrowing bank to the members who accepted the certificate in settlement of their credit balances (the 1873 issue, fixed at seven percent under the higher discount rates prevailing that September, was the exception, not the rule).³¹ It

²⁸Moen and Tallman 2010, 10–19 (trust-company reserves compared to member banks), 19–27 (resistance to reserve requirements imposed on agent-cleared trusts).

²⁹New York Clearing House Association 1898, sections 8, 16, 18–21, and 25; rules and scale of fines, 18–19.

³⁰Cannon 1910b, 5–19.

³¹Cannon 1900, 86–88; Sprague 1910, 49–56, 432–433.

circulated only among members of the association. It did not, and was not intended to, reach the public. It replaced no legal-tender obligation. It was not, in law or in practice, a note.

Christopher Hoag's 2016 study in *Financial History Review* argued that this reading was correct in every important particular, and that the certificate's later characterization as a form of central-bank money was a modern retrojection. Hoag showed, from the Boston Clearing House documents that survive at the Federal Reserve Bank of Boston, that the certificate operated as a loan from clearing members to a borrowing member, extended through the intermediation of the committee. The clearing house itself did not create the credit; it authorized the transfer. Two clearing-house members stood as the counterparties: the signature on the certificate committed the borrowing bank, the acceptance in settlement committed the receiving bank, and no third party stood between them.³² The absence of a central authority separated the New York Clearing House, constitutionally, from the Bank of England and the Federal Reserve system that followed it. To describe the certificate as central-bank money obscures the very feature that requires explaining.

The Comptroller of the Currency's 1908 annual report supplies a third view, that of the federal supervisor counting the wreckage after the panic. It put the loan certificates outstanding in New York in 1907 at a maximum of one hundred and one million dollars, and identified fifty-nine other cities where clearing houses had issued certificates of the same class during the same crisis, in aggregate amounts smaller by an order of magnitude. It separated these interbank certificates from a second body of 1907 emergency media (bearer cashier's checks and small-denomination scrip that did reach the public), noting that the second class violated the National Bank Act while the first did not.³³

O. M. W. Sprague's *History of Crises Under the National Banking System*, prepared for the National Monetary Commission in 1910, provides the near-contemporary comparison across the national-banking-era panics of 1873, 1884, 1890, 1893, and 1907. Sprague showed the interbank loan certificate used in each episode, in progressively larger amounts, and the practice refined at every iteration: the first authorization in 1860 was experimental, and by 1907 the association could issue certificates against a defined class of collateral, at a fixed rate, through a standing committee, within days of a decision to act.³⁴ Sprague also documented the public emergency-media class from 1893 forward and was clear that it was of a different order than the interbank certificate.

The three instruments had different users, different backing, different circulation, and different legal standing, and none of the panics can be read correctly with them run together.

The gold certificate

The gold certificate was, in principle, the oldest of the three. Similar certificates had circulated among London bankers well before Bagehot described them in *Lombard Street*, and the New York association's later use of the form was an adoption of an old and shared solution to a

³²Hoag 2016, 202–222.

³³United States Comptroller of the Currency 1908, 68–79.

³⁴Sprague 1910, 225–241, 279–297.

practical problem, not an invention.³⁵ Cannon reports that the association's first year, 1853, closed with a total daily average settlement of nineteen million dollars, and that the net balances owed among members in that year were settled by porters carrying bags of gold through the afternoon streets: heavy, at risk of theft, moved on foot.³⁶ A clearing house whose members were still walking coin across Wall Street in 1853 was not yet settling by certificate. The instrument's principle was old; its New York adoption came at some later point the surviving sources do not date; and a separate, federally issued gold certificate arrived by statute in 1863.

That statute supplied the second instrument, dated precisely: the gold-certificate provisions of the Act of March 3, 1863 let the Treasury receive deposits of gold coin and issue transferable certificates against them, certificates a clearing-house depository could then hold in the members' place, ending the need to carry the metal itself. The Independent Treasury Act of 1846, which predates the association, is not the source of this arrangement; it kept federal specie *out* of the banks and could not by itself have supplied a transferable receipt. It was the 1863 act, not the earlier one, that gave New York's clearing depository a federal instrument to hold instead of the coin. The surviving sources do not establish whether the association's own receipt preceded the federal certificate or how the two were used where they overlapped.³⁷

Either instrument solved the weight problem without solving the credit problem. A bank that deposited coin, with the Treasury under the 1863 act or with the association's own depository at whatever later date, could settle by presenting the certificate, and the certificate could pass among members, though it remained a receipt for gold that already existed. It added nothing to the supply of settlement assets and extended no credit; it changed how members carried assets they already held. For that reason the gold certificate never appears in the panics below as a controversial instrument. It belongs to the ordinary bookkeeping of settlement, and it stays there.

The interbank loan certificate

The loan certificate was different in every respect but its physical form. A member bank facing a settlement deficit applied to the association's loan committee, composed of the presidents of five member banks. The committee valued the applicant's pledged collateral at a discount from face, authorized a certificate in a specified denomination at the standing rate of six percent (seven in 1873), and delivered it to the association's manager, who paid it out at the daily settlement to the members holding credit balances against the applicant.³⁸ Acceptance did not arise from statute, but it was compulsory within the association once the members adopted the crisis resolution: by joining and voting for it, each member had consented in advance to receive its allotted share of certificates in place of cash. The instrument postponed

³⁵Bagehot 1873, 43–59; Cannon 1900, 78–91.

³⁶Cannon 1900, 138–141.

³⁷The Act of March 3, 1863 (gold-certificate provisions) is the only dated adoption the sources used here support.

³⁸Cannon 1910b, 13–29.

payment of an existing balance and paid interest to the receiving member until the borrower retired it.

Anderson, Hachem, and Zhang, working from the surviving 1873 committee minutes at Columbia, reconstructed the mechanism's operation in that panic and found that it did more than shift timing: it reallocated liquidity across members, moving credit from banks with strong reserves to banks with weak ones, the strong compensated with interest and the weak relieved of the immediate need to sell assets or refuse withdrawals.³⁹ That reallocation is what makes the central-bank analogy imprecise: a central bank issues its own liabilities against assets acquired under statutory authority and carries the result on its own balance sheet, while the Clearing House issued no liability of its own. It approved collateral and directed a transfer of credit between members; the credit itself remained member credit. Jaremski's balance-sheet evidence from 1863 through 1913 adds the distributional fact that follows from this structure: the protection the certificate offered was uneven, concentrated among established members, and smaller or peripheral banks received less of it.⁴⁰ The interbank certificate operated as a member instrument in a strict sense, and its restricted circulation was a structural feature of the mechanism, not an incidental limit.

The public emergency media

The third class sat outside the association's constitutional practice altogether. In each major panic from 1873 forward, and most visibly in 1907, some quantity of small-denomination paper circulated among the public as a substitute for currency: most often cashier's checks issued by individual member banks, payable to bearer, accepted by other members and by merchants because currency itself had grown scarce.⁴¹ These were not, in law, notes; they were checks, and the distinction mattered because the National Bank Act reserved note-issue to national banks operating under charter. Sprague was direct about the legal position: the 1907 emergency media operated at the edge of what the law permitted, and their use was tolerated by the Comptroller and the Treasury as an alternative to widespread failure, an ad hoc tolerance rather than a repeatable feature of the system.⁴² The emergency media came closer than anything else the Clearing House did to issuing a public instrument, and mark the point at which its private authority met the limit of what a private body could do without a public charter.

The taxonomy at a glance

Instrument	Basis	Holders	Function and status
Gold certificate	Gold deposited with a depository (the association's, or, af-	Members	Ordinary settlement receipt; no new credit

³⁹Anderson, Hachem, and Zhang 2021, 8–15.

⁴⁰Jaremski 2018, 437–441.

⁴¹Cannon 1910b, 41–52; United States Comptroller of the Currency 1908, 74–79.

⁴²Sprague 1910, 279–297; United States Comptroller of the Currency 1908, 74–79.

Instrument	Basis	Holders	Function and status
	ter 1863, the Treasury's)		
Loan certificate	Collateral pledged by a borrowing member, approved by committee	Members	Interest-bearing interbank credit; compulsory after the crisis resolution; not a public note
Public emergency media	Cashier's checks or local scrip issued by individual banks	Depositors and merchants	Currency substitute during suspension; legally ambiguous and tolerated ad hoc

A loan certificate was not a bank note, and a cashier's check payable to bearer was not a loan certificate.

The Clearing House did not perform a lawful public note-issue function. It did perform settlement, coordination, information, supervision, and emergency interbank lending for members. Each crisis from 1857 to 1907 tested that function against one jurisdictional fact: member instruments conferred no protection or standing on institutions outside the compact. For the same reason, "lender of last resort" fits the committee only functionally and with a qualifier: it could arrange liquidity after ordinary sources failed, but it lent no asset of its own and owed no duty to the banking system at large.

Chapter 4. The first experiments, 1857–1864

The loan certificate did not arrive as a finished instrument. It was assembled, clause by clause, out of emergencies that forced the associated banks to act before they had a settled way of acting, and the years between 1857 and 1864 show an improvisation hardening into a procedure. In 1857 the banks first tried to act together in an emergency without yet possessing an instrument they could act with, and the reach and the incompleteness of that first attempt are what the November 1860 resolution answered.

The 1860 resolution and the war-era issues that followed it are reconstructed from Cannon's published transcription and Sprague's independent tabulations, corroborated against each other where they overlap. The association's own committee books survive in manuscript at Columbia, and Anderson, Hachem, and Zhang worked directly from the 1873 minutes there for their reconstruction of that panic; the 1860 committee's deliberations, by contrast, are known only through what Cannon transcribed and Sprague tabulated.⁴³

⁴³Columbia University, Rare Book and Manuscript Library, *New York Clearing House Association Records, 1853–2006: Finding Aid*, boxes 148 and 165; Anderson, Hachem, and Zhang 2021, 8–15; Cannon 1900, 84–88; Cannon 1910a, 80–81; Sprague 1910, 432–433.

The panic of 1857 as latent capacity

The associated banks had been operating for four years when the failure of the Ohio Life Insurance and Trust Company on August 24, 1857 reached New York through the correspondent chain. Ohio Life was a large agency house whose western investments had turned sour; its New York office fell first, and by early September the New York banks were losing deposits as country banks called their balances home. Gibbons described the weekly clearing-house returns falling steadily through September, the banks losing gold as fast as they could count it, and the pressure moving into New York from the interior along the same correspondent chain that would carry every later panic.⁴⁴ Call-loan rates rose past twenty percent and then past thirty; specie in the vaults of the associated banks halved between mid-August and mid-October; and on October 13 the associated banks suspended cash payments together, four days after Philadelphia and Boston had done the same.

What the association did between Ohio Life's failure and the general suspension was tentative and partial, and the tentativeness is what makes 1857 a test of the latent capacity the 1853 compact had built. The banks met, deliberated, and adopted a resolution under which a small number of the strongest members would receive from weaker members certain classes of collateral and issue clearing-house certificates against them for use in settlement: recognizably the loan certificate that would be perfected in 1860, but authorized too late to prevent the accelerating loss of gold, applied at a limited scale, and never treated by the association itself as the general instrument the 1860 resolution would install. Calomiris and Schweikart, reconstructing the panic across the whole American banking system, read the September action as a first-attempt private response that reduced the severity of New York's suspension without preventing it, and treated the geographic containment of the crisis (reaching Chicago and Cincinnati but stopping short of New Orleans and the deep South) as evidence of institutional variation across the country's clearing arrangements rather than of a single New York achievement.⁴⁵

The panic of 1857 mattered for what it did not settle. The associated banks proved they could meet as a body, authorize a form of collective credit, and coordinate a general suspension. They did not yet possess a written procedure specifying who would decide, on what security, at what discount, and with what obligation on the other members to accept the result: every one of those clauses had still to be written into the November 1860 resolution three years later. Sprague, writing fifty years afterward, treated the 1857 arrangement as the precedent 1860 formalized rather than as an independent instrument of the same class, and on the continuity he is persuasive; Calomiris and Schweikart are right, though, that 1857 was more than a footnote. It was the first occasion on which the associated banks acted collectively against a crisis, and the terms on which they acted, and did not act, are what 1860 corrected.⁴⁶

⁴⁴Gibbons 1858, 340–380.

⁴⁵Calomiris and Schweikart 1991, 807–834.

⁴⁶Sprague 1910, 41–45.

The resolution of 1860

The crisis that followed the presidential election of November 1860 provided the occasion: secession fears drained specie from New York and cast doubt on Southern debts. On November 23 the associated banks adopted a resolution authorizing a committee of five to value member securities, issue certificates up to seventy-five percent of that value, fix interest, allocate certificates among creditor banks, and demand additional collateral when necessary.⁴⁷ Cannon does not supply the debate, the distribution of votes, or any amendments that may have preceded adoption; the resolution's clauses read as powers the association formally assumed, not as a single intention shared by every member who voted.

Each clause installed a piece of machinery that outlasted the crisis that prompted it. By providing that a committee should value a member's securities and certify only three-quarters of that value, the resolution gave the association a discretionary judgment over its members' assets that no member held alone: the margin held back was the association's protection against having to sell the pledged security in a falling market. Hoag's reading of the transaction is precise on what it was and was not: a loan from the members who accepted the certificate to the member who pledged the collateral, brokered by the committee, with the association itself standing as no party to the debt and creating no credit of its own.⁴⁸ By providing that creditor members would receive certificates daily in proportion to the debit balances against them, the resolution converted acceptance from a bargain struck in the moment into an obligation the members had assumed as a body: the prior consent, Hoag argues, without which the instrument could not have passed among banks that were themselves afraid.⁴⁹ Interest allocation among the holders completed the arrangement. Collateral review, compulsory acceptance, interest allocation: three of the four elements that would define the certificate in every later panic were present in the first resolution because the emergency of 1860 had required the association to specify them.

The fourth element would trouble the association's conscience for the next half century, and it appeared as a single sentence about the members' specie. Alongside the certificate the banks resolved that their specie should be "considered and treated as a common fund for mutual aid and protection," to be equalized among members by the committee.⁵⁰ The clause did for reserves what the certificate did for settlement: it treated the separate cash of separate banks as a pool the committee could redistribute, taking coin from a member with a surplus and placing it with a member under heavier demand, so the strong were made to carry the weak for the length of the emergency. Sprague traced reserve equalization to this 1860 origin and treated it as the device by which common settlement was extended into a common reserve: the moment the association first claimed authority to move its members' cash by collective decision, a claim renewed, and criticized, in every panic that followed.⁵¹

⁴⁷Cannon 1900, 84–86.

⁴⁸Hoag 2016, 202–215.

⁴⁹Hoag 2016, 216–222.

⁵⁰Cannon 1900, 86–88.

⁵¹Sprague 1910, 48.

The arrangement was neither a central bank nor a mere settlement convenience. A central bank issues its own liabilities against assets acquired under statutory authority; the association issued no liability of its own and retained no balance-sheet position. Certificate credit came from accepting members, and if a borrowing member ultimately failed, the pledged collateral and the borrower's own obligation stood behind the certificate: many balance sheets supporting one another, in Anderson, Hachem, and Zhang's phrase, rather than a single balance sheet standing behind them.⁵² The resolution delegated these judgments to five bankers because the full membership could not value collateral or call for additional security at crisis speed; the surviving 1873 minutes show the later committee exercising the same functions and recording each issue against the borrower, so the first experiment established both the instrument and the concentrated form of decision later panics would use.⁵³

Four issues, one procedure

The first issue tested the machinery and showed the association legislating for itself as it went. Certificates authorized on November 23, 1860 came in the end to an aggregate of \$7,375,000, with the maximum outstanding near \$6,860,000, and the last was cancelled on March 9, 1861.⁵⁴ The association had first set a limit of five million dollars, and within ten days, on December 3, raised it to ten million as demand outran the first estimate: a body setting its own ceiling and then raising it by its own vote, exercising a legislative power over conduct it had invented days before. The issue was retired without loss, which mattered as much as the issue itself: it established that the instrument could be taken up in a crisis and laid down when the crisis passed.

The Civil War carried the instrument into a larger and stranger use. The second issue, beginning September 19, 1861, grew to an aggregate of \$22,585,000, with a maximum of \$21,960,000 on February 7, 1862 (more than three times the scale of the first).⁵⁵ As the New York banks, having advanced heavily to the Treasury, moved toward the general suspension of specie payments at the end of 1861, the collateral behind the certificates shifted from ordinary commercial securities toward the temporary receipts and war paper the government was issuing to fund itself.⁵⁶ An instrument devised for a commercial panic was now issued against the war debt of the federal government, entangling the association's private machinery, for a season, with the public finance of the Union, though government collateral did not make the certificate a public instrument: the accepting member still extended the credit, the borrowing member still pledged the security, and neither the Treasury nor the Clearing House became the obligor.⁵⁷

The issues of 1863 and 1864 are where Cannon and Sprague part company, and the disagreement turns on what the war issues were for. Cannon recorded them as substantial operations: a third issue from November 6, 1863, aggregating \$11,471,000 with a maximum

⁵²Anderson, Hachem, and Zhang 2021, 8–15.

⁵³Cannon 1900, 84–86; Anderson, Hachem, and Zhang 2021, 8–15.

⁵⁴Cannon 1900, 86–88.

⁵⁵Cannon 1900, 86–88.

⁵⁶Cannon 1900, 86–88.

⁵⁷Hoag 2016, 216–222; Sprague 1910, 46, 48.

near \$9,608,000, and a fourth from March 7, 1864, aggregating \$17,728,000 with a maximum of \$16,418,000, the last redeemed June 13, 1864.⁵⁸ Sprague's appendix table confirms Cannon's totals and dates row by row, but dismisses the two later issues in a footnote as certificates put out for special purposes of no general importance, treating the significant precedent for 1873 as lying in 1860 and 1861 rather than in the war issues that followed.⁵⁹ The figures do not conflict; the interpretation does. The war issues were large, rested on government paper, and belong either to the history of the crisis certificate or to the history of war finance, and nothing in Cannon or Sprague settles which.

Each issue was retired (the 1860 certificates by March 1861, the war issues by mid-1864), holders paid and borrowers discharged.⁶⁰ By 1864 the association had a repeatable procedure: committee valuation, collateral margins, compulsory acceptance, interest allocation, reserve equalization, and eventual retirement. Sprague identified these arrangements as the precedent 1873 would follow, and the later committee minutes show the mechanism applied rather than reinvented.⁶¹ The certificates existed only after a crisis vote and disappeared after redemption, but what endured between episodes was institutional memory: resolution forms, accounting practice, accepted collateral logic, and an expectation that members would honor an allocation in the next emergency. When 1873 came, the committee did not need to persuade frightened banks of every term from the beginning.

Part III: Crisis as a test of authority

Chapter 5. 1873: liquidity and reform

On the morning of September 18, 1873, the New York house of Jay Cooke and Company suspended payment, and a firm that had placed the Union's war bonds and staked its credit on the Northern Pacific Railway could not meet the demands upon it. The news reached the call-loan market before noon. Cannon set the sequence out as a chronology of hours rather than days, because in September 1873 the interval between a distant railroad's insolvency and a run on a Wall Street bank had collapsed to a single afternoon.⁶² Fisk and Hatch failed the next day; the deposit banks that had lent on call watched their reserves drain toward brokers who could not repay; and on September 20 the governors of the New York Stock Exchange closed the floor and kept it closed for ten days, the first such closure in the institution's history.⁶³

Closing the Exchange interrupted the market on which banks expected to liquidate call loans and securities. Assets that appeared convertible in ordinary trading could no longer be sold at a dependable price, while deposit claims remained payable: a funding run met a market closure at the same moment, and banks needed cash precisely when the mechanism for turning collateral into cash had stopped.

⁵⁸Cannon 1900, 86–88.

⁵⁹Sprague 1910, 46, 432–433.

⁶⁰Cannon 1900, 86–88; Sprague 1910, 432–433.

⁶¹Sprague 1910, 46; Anderson, Hachem, and Zhang 2021, 25–31.

⁶²Cannon 1900, 88–94.

⁶³Sprague 1910, 40–49.

The failure of a railroad financier in New York became a national emergency because of how the banking system stored its reserves. Under the National Banking Act, country banks kept much of their required reserve on deposit with reserve-city banks, which in turn kept much of theirs in New York, so interior balances collected, through the correspondent chain, in the vaults of a few large New York institutions. The Comptroller's annual tabulations traced these balances across the system and showed how completely the interior depended on the New York redeposit;⁶⁴ Cannon, describing the same structure from the clearing house outward, noted that the associated banks therefore held, at one remove, a working part of the nation's reserve, so a panic reaching their counters reached the country's cash at once.⁶⁵ The arrangement was individually rational and systemically fragile, and the instrument the members reached for on September 20 was designed for a settlement among a few dozen banks while the pressure it had to withstand came from the whole system that had redeposited in them.

The associated banks met the afternoon the Exchange closed. On September 20 the members authorized the loan committee to issue clearing-house loan certificates against approved collateral, at seven percent interest, receivable among members in settlement of the daily balance; in a second resolution taken the same week, they agreed to treat the legal-tender reserves of the associated banks as a common fund, equalized among members by the committee.⁶⁶ The first resolution was, by 1873, a known instrument. The second was not. Taken together the two turned a set of individual defenses into a single collective one, and it is the combination, not either measure alone, that gives 1873 its place in the association's history: reserve equalization began from the aggregate position of the membership and asked where legal tender was most needed, while the certificate moved from approving bilateral credit within a common framework to directing a scarce asset across the group.

A member seeking relief pledged collateral to the loan committee, which valued it at a discount and issued an interest-bearing certificate; creditor members received the paper in settlement under the collective resolution. Hoag identifies the transaction as a loan from the accepting members to the borrower, brokered by the committee, with the association itself never the debtor.⁶⁷ Reserve equalization complemented the certificate: the certificate released a distressed bank from finding currency for interbank settlement, while equalization moved actual legal tender toward banks facing withdrawals. Anderson, Hachem, and Zhang, using committee minutes and weekly statements, trace reserves flowing from stronger banks toward those losing deposits fastest: a strong bank carried a weaker one not by voluntarily buying its certificate, but by following the distribution rule the association had adopted for the emergency.⁶⁸

That description would have alarmed Sprague, who examined the 1873 measures for the National Monetary Commission thirty-seven years afterward and treated reserve equaliza-

⁶⁴United States Comptroller of the Currency 1893, 14–27.

⁶⁵Cannon 1900, 82–88.

⁶⁶Cannon 1900, 94–101; Sprague 1910, 49–56.

⁶⁷Hoag 2016, 202–215.

⁶⁸Anderson, Hachem, and Zhang 2021, 8–24.

tion as the association's characteristic error rather than its achievement. His objection was not to the relief it gave in the moment but to the lesson it taught for the future: a bank that expected its reserves to be pooled in the next panic had every reason to hold fewer of them in the calm before it, secure that the strong banks would be conscripted to cover any short-fall. Equalization, on this account, rewarded the improvident member at the prudent one's expense, and weakened the very reserves it mobilized.⁶⁹ The measure Anderson, Hachem, and Zhang credit with resolving the crisis is the measure Sprague blamed for shaping the next one, and both can be right, because they answer different questions on different time horizons: whether liquidity moved to the banks losing deposits in September, and how the expectation of future pooling might have shaped reserve choices before the next panic.

A plainer fact sits beneath that disagreement: for several weeks that autumn the associated banks could not, and did not, pay their depositors in full. Cash payments were partially suspended across the New York banks; currency traded at a premium against certified checks, reaching three to four percent in the worst days; and a depositor who wanted legal tender for a check on a solvent bank had to accept less than its face, or wait.⁷⁰ The suspension was never declared in a single proclamation. It was a practice the banks arrived at together and abandoned together, and it held the system intact by refusing the public the one thing the public most wanted: money on demand. A single bank suspending in 1873 would have been finished by nightfall; the associated banks suspending together were merely closed at the window while remaining open on the books.

The suspension pressed outward along the same correspondent lines that had carried the panic in. When New York restricted cash payments, interior banks that kept their reserves there could not draw the currency they were owed, and the restriction propagated to country banks and their own depositors: a decision made in a room on Cedar Street rationed money in towns whose bankers had no vote in it. The Comptroller's tabulations show how far these balances reached;⁷¹ Wicker, counting interior suspensions from Comptroller returns and state commissioners' reports Sprague did not use, found 1873 an unambiguously national event whose failures reached deep into the West and South. Sprague supplies the New York chronology and Wicker the geographic extent; the two answer different questions, and neither displaces the other.⁷² Jaremski's comparative evidence sharpens the distributional point: banks with direct membership or a strong New York correspondent fared best through the currency famine, while banks at the far end of the chain, holding claims on a suspended New York, fared worst.⁷³ The collective action that saved the members was, at the same moment, a rationing imposed on everyone the members owed, and the people rationed had no standing in the room that decided it.

The certificates carried the settlement through the suspension. The committee issued them from September into the winter, and the totals, reconciled across Cannon's tabulation and

⁶⁹Sprague 1910, 56–71.

⁷⁰Sprague 1910, 71–84; Cannon 1900, 101–107.

⁷¹United States Comptroller of the Currency 1893, 27–39.

⁷²Wicker 2000, ch. 2.

⁷³Jaremski 2018, 441–447.

Sprague's, come to roughly twenty-six million dollars in all, with the maximum outstanding near twenty-two million, retired in full by early 1874.⁷⁴ The figures are modest beside what the instrument would reach in 1907, and their modesty is instructive: 1873 was the first panic in which the certificate was used at the scale of the whole association, and the association learned the size of its own instrument as it used it.

In November 1873 a member committee converted the emergency experience into recommendations, defending certificates while treating reserve equalization more cautiously: pooling had supplied collective security but weakened the principle that each bank should maintain its own reserve.⁷⁵ The report recommended uniform handling of applications and clarified denominations and interest, largely formalizing what the committee had improvised in September and October; 1873 was therefore a reform as well as a rescue, preserving an effective short-run tool while recording the moral-hazard concern Sprague later emphasized.⁷⁶ The technique spread that year to Philadelphia, Boston, Cincinnati, and other cities. Collateral standards, fixed interest, collective acceptance, and committee administration became a repeatable template rather than a New York improvisation: a federated practice without a federal institution, and with no body authorized to coordinate timing, collateral standards, or obligations to banks outside their respective memberships. Jaremski finds that established members of strong associations received the greatest protection, while smaller and agent-cleared banks received less.⁷⁷ Better collateral rules and clearer committee procedure could improve how members treated one another; they could not give an interior bank a vote in New York or make a non-member eligible for support.

Chapter 6. 1884, 1890, and 1893: the national network

The failure that opened the panic of 1884 was a swindle. On May 6 the brokerage of Grant and Ward collapsed, carrying with it the Marine National Bank, whose president had lent the firm the bank's money against worthless security; a week later the Second National Bank lost its president to embezzlement, and the Metropolitan National Bank, a large institution with a wide correspondent connection, came under suspicion and began to lose deposits.⁷⁸ The associated banks did in May 1884 what they had learned to do in 1873. The clearing-house committee examined the Metropolitan, satisfied itself the bank was solvent behind its frightened depositors, published that judgment, and arranged support that let the bank open its doors; on May 15 the members authorized the loan committee to issue certificates against approved collateral, on the terms 1873 had settled. The disturbance did not spread. It stayed within New York and within a few of the city's banks, and the certificates that carried it (nearly twenty-five million dollars issued, with the maximum outstanding near twenty-two million) were retired before the year was out.

The disturbance stayed local partly because its causes were local. The correspondent struc-

⁷⁴Cannon 1900, 101–107; Sprague 1910, 84–90.

⁷⁵Sprague 1910, 90–104.

⁷⁶Sprague 1910, 104–108; Cannon 1900, 107–113; Anderson, Hachem, and Zhang 2021, 25–31.

⁷⁷Jaremski 2018, 437–441.

⁷⁸Cannon 1900, 113–119.

ture still gathered interior reserves into New York,⁷⁹ but country banks had no general reason to call those balances home. Fraud made the informational problem unusually sharp: depositors who learned that one bank president had financed worthless collateral and another had embezzled could reasonably suspect similar facts lay hidden elsewhere, and by certifying the Metropolitan's solvency the committee produced bank-specific information capable of stopping a run at the moment the public was generalizing from one failure to the next.⁸⁰ The association issued certificates without pooling reserves or restricting cash payments. Sprague read the episode as a graduated response (examination and limited interbank credit sufficed for a local shock) while Wicker classified 1884 as a Wall Street incident rather than a national banking panic, on the ground that the failures were concentrated in a handful of New York houses and the correspondent chain did not transmit a general run to the interior.⁸¹ The classification matters because it explains why the association's measures could be graduated rather than exhaustive: Wicker settles the scope of the episode, Sprague the chronology of the New York response.

The stringency of 1890 came from farther away and touched New York more lightly than 1884 had. In November the London house of Baring Brothers, overcommitted to Argentine loans it could not liquidate, was found insolvent, and only a guarantee organized by the Bank of England among the London banks prevented its failure from breaking the London market.⁸² The shock reached New York through the exchanges and the withdrawal of foreign balances rather than through a domestic failure, and the associated banks met it as they had met 1884, with certificates and without suspension: about sixteen and a half million dollars issued, the maximum outstanding near fifteen million, retired over the winter. There was no equalization of reserves, no premium on currency, no general restriction of payments. Compulsion arose inside the association from prior consent, not from the Bank of England or the United States,⁸³ and the certificate absorbed a foreign shock as readily as a domestic one so long as the shock stayed within the membership that accepted the paper.

The panic of 1893 was of another order: national and structural rather than local and particular. Through 1892 and into 1893 the Treasury's gold reserve fell toward the hundred-million mark the market watched as the sign of the currency's convertibility, pressed down by the silver purchases the Sherman Act of 1890 required and by fear that the United States would be driven onto a silver standard; when the Philadelphia and Reading Railroad failed in February and the National Cordage Company collapsed in early May, the doubt gathering around the currency fixed itself on the banks.⁸⁴ The failures of 1893 were not the swindles of 1884. They were the visible edge of a withdrawal of confidence from the whole system of credit, running outward from New York along correspondent lines 1884 had left undisturbed, combining fear about the monetary standard, asset values, and institutional solvency in a way no examination of a single New York member could contain.

⁷⁹United States Comptroller of the Currency 1893, 14–27.

⁸⁰Cannon 1900, 119–124.

⁸¹Sprague 1910, 108–121; Wicker 2000, ch. 3.

⁸²Sprague 1910, 123–131.

⁸³Cannon 1900, 119–131.

⁸⁴Cannon 1900, 124–131; Sprague 1910, 153–167.

The pressure moved from the interior toward New York. Country banks drew balances from reserve-city correspondents, which in turn drew on New York; the Comptroller counted hundreds of suspensions, concentrated far from the reserve centers.⁸⁵ Wicker's reconstruction, drawn from Comptroller returns and state commissioners' reports Sprague did not use, shows the failures falling disproportionately on the western and southern interior, and treats 1893 as an interior panic that reached New York through the correspondent chain rather than a New York panic that propagated outward; the geography of the suspensions bears him out.⁸⁶ What appeared as an available reserve on many country-bank balance sheets had in fact been lent into the New York market and could not be returned simultaneously without contraction; the same network that concentrated reserves for efficiency concentrated withdrawals under fear.

Against that pressure the associated banks reached for the instrument of 1873, enlarged. On June 21 the loan committee began issuing certificates, and the total came to roughly forty-one million dollars in New York, the maximum outstanding near thirty-eight million (nearly double 1884 and more than twice 1890).⁸⁷ The mechanism was the one the earlier panics had matured: collateral valued at a discount, a fixed rate of interest, circulation among members in settlement of the daily balance, retirement when the pressure eased. But the certificate settled balances among members; it did not itself cross the counter to a country banker withdrawing his balance, and the currency the interior wanted was a different asset than the paper the members exchanged among themselves. When the demand for actual cash outran what the members could supply while still settling with one another, New York did in 1893 what it had done in 1873, and restricted the payment of currency. Multiplying certificates increased the amount of member settlement that could occur without currency; it did not make one certificate spendable at a country counter, and the largest private issue could remain narrower in reach than a much smaller lawful public currency would have been.

The suspension of 1893 was partial, collective, and it rationed the country's cash from a room in which the country had no seat. Through August the New York banks paid depositors in limited amounts, currency traded at a premium against certified checks that briefly passed three percent, and interior banks holding reserves in New York could not draw the cash they were owed.⁸⁸ The rationing propagated outward along the same chain the panic had traveled inward: a country bank whose depositors wanted currency found its New York correspondent would remit only in part, and the restriction reached the country depositor at the far end of the chain, who had never heard of the committee that imposed it. In several cities small-denomination paper also passed among the public as a substitute for scarce currency, in local forms and denominations that produced a family of substitutes rather than one centrally governed note: decentralized adaptation, and the absence of a uniform lawful medium able to expand nationwide.⁸⁹ Sprague treated the 1893 certificate issue as the proven part of the

⁸⁵United States Comptroller of the Currency 1893, 27–52.

⁸⁶Wicker 2000, ch. 4.

⁸⁷Cannon 1900, 131–137.

⁸⁸Sprague 1910, 167–181; United States Comptroller of the Currency 1893, 52–68.

⁸⁹Cannon 1900, 137–145.

response, supporting settlement at unprecedented scale without reviving the reserve pooling he had criticized in 1873; Jaremski’s distributional evidence qualifies the achievement rather than contesting it: protection followed membership and position in the correspondent chain, while many failures occurred farther from the reserve center.⁹⁰ A successful defense of the center and an unequal burden on the periphery are not a contradiction; the correspondent structure is what made both outcomes part of the same episode.

New York loan-certificate issues, 1860–1907

Two figures recur across these episodes and are worth defining once. “Aggregate issued” is the total face value of certificates put out over an episode, counting any that were retired and reissued; it is a flow, measured over the life of the crisis response. “Peak outstanding” is the largest amount owed on unretired certificates at any single moment; it is a stock, measured at one date. The two will not generally match, because certificates were continually retired as members repaid and reissued as new applications arrived.

Episode	Aggregate issued (\$ millions)	Peak outstanding (\$ millions)	Peak date	Source
1860	7.4	6.9	Dec. 22, 1860	Cannon 1900, 86–88
1861–62	22.6	22.0	Feb. 7, 1862	Cannon 1900, 86–88
1863	11.5	9.6	late Nov. 1863	Cannon 1900, 86–88
1864	17.7	16.4	Apr. 20, 1864	Cannon 1900, 86–88
1873	about 26	about 22	late Sept.–Oct. 1873	Cannon 1900, 101–107; Sprague 1910, 84–90
1884	about 25	about 22	May 1884	Cannon 1900, 113–119
1890	about 16.5	about 15	Nov.–Dec. 1890	Sprague 1910, 123–131
1893	about 41	about 38	Aug. 1893	Cannon 1900, 131–137
1907	not comparably tabulated ⁹¹	about 101	Nov. 23, 1907	United States Comptroller

⁹⁰Sprague 1910, 181–195; Jaremski 2018, 441–451.

Episode	Aggregate issued (\$ millions)	Peak outstanding (\$ millions)	Peak date	Source
				of the Cur- rency 1908, 68–73

By 1907 the association could mobilize an instrument many times larger than its first issue without reinventing its terms; the intervening crises show why no single reform followed automatically from experience. In 1884 and 1890, limited certificates and examination proved sufficient. In 1893, the same machinery preserved the center while currency restriction propagated nationally. The private system could point to repeated technical success; critics could point to the costs and exclusions that success did not remove. Both cases entered the debate 1907 would force into Congress.

Chapter 7. 1907: capacity and jurisdiction

The panic of 1907 began not with a failure but with a speculation. In mid-October, Otto Heinze, in partnership with Charles W. Morse, attempted to corner the stock of the United Copper Company through the brokerage of Otto Heinze & Co., and the corner broke. When United Copper collapsed on October 16, the brokerage that had financed the operation failed with it. The banking chain assembled around a Montana copper fortune and a run of promotions (the Mercantile National Bank, under Otto's brother F. Augustus Heinze, and the deposit institutions associated with Morse) carried the panic outward: depositors of banks whose officers were tied to Otto's speculation and Morse's promotions began drawing their money out, and the failure of a broker on the Curb passed into a run on the counters of half a dozen national banks.⁹² The trouble was, at its origin, a scandal of particular men, and it might have stayed particular. What made it general was the structure it fell into, and the response that structure was able, and unable, to make.

The associated banks moved against the compromised chain before the public panic had fully formed, with a weapon the earlier panics had not shown in the same form: examination. The clearing-house examination committee took up the banks connected to F. Augustus Heinze and Morse, established their condition, and made continued clearing for them conditional on the removal of the Heinzes, Morse, and their associates from management. The offending men were forced out; the sound banks in the chain were separated from the unsound connection; and the association, having examined, certified to the members which institutions could still be dealt with.⁹³ Gorton and Tallman, studying how the pre-Federal-Reserve panics were brought to an end, place this examining power at the center of what the clearing house actually did: in a panic, the production of trustworthy information about which banks are

⁹¹The Comptroller's 1908 report and Cannon's 1910 statement give the 1907 peak but no aggregate figured on the same basis as the episodes above; 1907 ran as a continuous, months-long issue rather than the shorter discrete episodes of 1860–1893, and the surviving tabulations were not built to yield a comparable total. See Chapter 7.

⁹²Sprague 1910, 240–249.

⁹³Cannon 1910b, 78–89.

sound is itself a form of rescue, because a run is in large part a failure of the public to know whom to trust.⁹⁴ The committee could act quickly because membership had created an information relationship before October: the association knew the banks, possessed a standing right to inspect them, and could condition continued clearing on changes in management.

The institutions most exposed in 1907 were the ones the association did not examine at all. The trust companies had grown through the preceding decade into large holders of deposits, under reserve requirements far lighter than those binding the national banks, keeping a smaller cushion of cash against their obligations and placing a larger share of their funds in loans and securities. Moen and Tallman's reconstruction shows the New York trusts' deposits had come to rival those of the national banks while their cash reserves lay well below the level the associated banks were required to hold.⁹⁵ They were not members of the clearing house; they cleared through member banks as agents, submitted to no clearing-house examination, and stood outside the discipline and the protection alike. Jaremski's comparative work identifies this population as the one the clearing-house arrangements left most exposed, guarded neither by their own reserves nor by an association that owed them nothing.⁹⁶ Before the panic, efforts to bring agent-cleared trusts closer to member reserve standards had met resistance, and some trusts had preferred to abandon the clearing relationship rather than accept it: discipline and protection declined together.

Knickerbocker depended on the National Bank of Commerce to clear its checks. When Commerce withdrew on October 21, the trust had no independent standing with the Clearing House.⁹⁷ A committee met that night, judged the available information insufficient, and declined support. The next day Knickerbocker paid roughly eight million dollars before closing; the speed of its fall spread fear through the trust companies.⁹⁸ Charles T. Barney was forced from Knickerbocker's presidency and took his own life within a month, on November 14, 1907. The bankers had faced an institution of enormous size with uncertain assets, no prior submission to their rules, and hours in which to decide whether collective funds would follow it, and their refusal protected members from an obligation they had never assumed. The public, however, read the withdrawal of clearing and the refusal of support as a verdict, and settlement dependence turned a private agency decision into a signal depositors acted on immediately.

Within the compact, the decision applied a defensible rule: Knickerbocker had neither joined the association nor submitted to continuous examination. From Pujo's later vantage, the episode exposed a system in which private bankers decided which large institutions would receive support without a public standard or public review.⁹⁹ What Knickerbocker lacked was an entitlement grounded in membership and a procedure established in advance; the association's discretion reached beyond its formal jurisdiction, while its duty did not.

⁹⁴Gorton and Tallman 2018, ch. 3.

⁹⁵Moen and Tallman 2010, 10–19.

⁹⁶Jaremski 2018, 445–451.

⁹⁷Sprague 1910, 249–257.

⁹⁸Sprague 1910, 249–257; Moen and Tallman 2010, 19–27.

⁹⁹United States House Committee on Banking and Currency 1913, 148–160; Jaremski 2018, 445–451.

When the run shifted to the Trust Company of America, J. P. Morgan concluded the institution was solvent and organized funds to keep it open.¹⁰⁰ Secretary of the Treasury George Cortelyou deposited federal money in national banks, while Morgan assembled pools from banks and surviving trusts for the trust company and the frozen call-loan market.¹⁰¹ The response combined federal cash, member reserves, and private direction: Moen and Tallman establish the scale and effectiveness of the mobilization, Pujo the small number of private hands that directed it.¹⁰² The Trust Company of America, like Knickerbocker, stood outside the Clearing House, so the contrast between the two rescues was not produced by membership alone: the difference lay in a second private judgment about solvency and systemic consequence, backed by Morgan's ability to compel cooperation among institutions he influenced. The Clearing House acted under rules and offices its constitution defined; Morgan acted through reputation, relationships, and bargaining power, at times bringing non-member trusts into pools the association could not formally command. The two forms of private authority overlapped in people and resources, and should not be collapsed into one.

Once the association resolved to act at scale, it acted with the instrument the earlier panics had matured. On October 26 the loan committee authorized clearing-house loan certificates on the terms 1873 and 1893 had settled: collateral valued at a discount, a fixed rate of interest, circulation among members in settlement of the daily balance. The Comptroller, tabulating the issues afterward, counted the New York certificates outstanding at a maximum near one hundred and one million dollars (an order of magnitude beyond the twenty-odd million of 1873) and identified parallel issues in fifty-nine other cities during the same crisis.¹⁰³ The instrument had grown, but it had not changed. What had changed was the size of the system it now had to carry and the number of institutions standing just outside it.

Other paper did reach the public: member banks issued small bearer cashier's checks, and local scrip substituted for scarce currency. The Comptroller tabulated these media separately from interbank certificates and described their legal position as tolerated in the emergency rather than authorized by the National Bank Act.¹⁰⁴ A merchant accepting a bearer check was relying on the issuing bank and local convention, not on the collateral-review procedure that governed a loan certificate, and the paper carried no membership rule compelling every recipient to take it.

The certificate freed reserves for the counter but could not add currency to the system. In late October the banks partially suspended cash payments, and currency rose to a premium of more than three percent against certified checks.¹⁰⁵ The association also replaced individual weekly bank statements with an aggregate figure; Gorton and Tallman treat the concealment as protective, since a run has fewer targets without institution-specific numbers.¹⁰⁶ The same

¹⁰⁰Sprague 1910, 257–266; Moen and Tallman 2010, 10–19.

¹⁰¹Sprague 1910, 257–266; Moen and Tallman 2010, 19–27.

¹⁰²Moen and Tallman 2010, 19–27; United States House Committee on Banking and Currency 1913, 148–160.

¹⁰³United States Comptroller of the Currency 1908, 68–73; Cannon 1910b, 5–19.

¹⁰⁴United States Comptroller of the Currency 1908, 73–85; Cannon 1910b, 41–52.

¹⁰⁵Sprague 1910, 266–279; United States Comptroller of the Currency 1908, 73–79.

¹⁰⁶Gorton and Tallman 2018, ch. 4.

organization that used disclosure to discipline members in calm used secrecy to protect them in panic.

The suspension bought time, and the time was used to draw gold across the Atlantic. The premium on currency in New York, and the high interest rates the panic produced, pulled gold from London and the Continent, and through November and December something on the order of a hundred million dollars in gold was imported, replenishing reserves the domestic panic had drained.¹⁰⁷ The imports were not the association's doing in any direct sense; they were the market's response to the premium the suspension had created. But they mark the outer edge of what the association's instruments could accomplish. The certificate could redistribute reserves among members; the suspension could ration currency and buy weeks; only the importation of gold could add to the reserves the whole system held, and that addition came from outside the association, drawn by prices rather than authorized by any committee.

Over the winter the currency premium fell, full cash payments resumed, and individual statements returned. Certificates were retired without loss by mid-1908.¹⁰⁸ Pujo's investigators identified discretion at the back end of the instrument as well as the front: calling certificates forced a borrower to find currency, and a premature call could recreate the pressure the issue had relieved; the same committee decided when support began and when it ended.¹⁰⁹ Recovery vindicated the measures in a defined sense (member banks survived, settlement continued, certificates were redeemed), but it did not retroactively supply Knickerbocker with a rule of access, or country banks with a voice over suspension. The associated national banks emerged without a member failure, while trust companies and institutions connected to the exposed margin carried the most visible losses; part of that result reflects weaker trust reserves and different portfolios, and part reflects where collective support was, and was not, extended.

In 1907 the association examined and reorganized banks, mobilized member credit, managed information, coordinated suspension, and held the banking core together.¹¹⁰ It did so through member committees and member instruments. Jaremski's evidence supplies the qualification that protection remained strongest inside the organized core, while institutions such as Knickerbocker stood outside any assured claim.¹¹¹ The Clearing House possessed settled duties, information, and instruments for members; beyond them it possessed influence and discretion without a comparable obligation, and in a national panic that gap between consequence and accountability had grown too large to remain a private association's problem alone. The immediate federal response would still borrow from association practice: Aldrich-Vreeland currency associations used groups of banks and approved collateral to authorize temporary emergency currency, while the National Monetary Commission studied a permanent system.

¹⁰⁷Sprague 1910, 279–291; Moen and Tallman 2010, 27–35.

¹⁰⁸United States Comptroller of the Currency 1908, 79–85; Cannon 1910b, 19–29.

¹⁰⁹United States House Committee on Banking and Currency 1913, 155–168; Jaremski 2018, 445–451.

¹¹⁰Moen and Tallman 2010, 35–42; Gorton and Tallman 2018, ch. 4.

¹¹¹Jaremski 2018, 445–451.

Part IV: Statutory succession

Chapter 8. From private compact to statutory system

The Federal Reserve Act did not simply enlarge the clearing house or replace private control with complete public control. It created a statutory hybrid: twelve regional Reserve Banks capitalized by member banks and governed through mixed boards, coordinated and supervised by a publicly appointed Federal Reserve Board. Some clearing-house techniques passed into this structure, some changed fundamentally, and some had different institutional origins.

Timberlake's central-bank thesis

The strongest opposing case is Richard Timberlake's. In a 1984 article, Timberlake argued that the New York and other American clearing-house associations, in the great suspensions of 1873, 1893, and 1907, evolved central-banking functions in fact if not in charter: issuing a fiat currency substitute, providing aggregate liquidity to member banks, and extending lender-of-last-resort assistance to non-members through indirect channels, in instruments he called "equivalent to bank reserves, that is, high-powered money." He counted roughly one hundred million dollars of clearing-house hand-to-hand currency in 1893 and about five hundred million in 1907, and read those magnitudes as evidence that a private association had, by repeated performance, acquired the standing functions of a central bank.¹¹² Clearing-house committees did what a central bank does in a crisis: they gathered information, valued collateral, extended emergency credit, and managed the release of currency to the public. That functional resemblance is not in dispute.

The taxonomy of the three papers is what limits it. Timberlake's aggregates pool three instruments the primary sources keep distinct: the interbank loan certificate, a collateralized member loan brokered by committee and legally the obligation of the borrower, not the association; the gold certificate, a receipt for coin already on deposit that created no credit; and the public emergency media, small-denomination paper the Comptroller tolerated rather than authorized. His 1907 figure also pools New York with fifty-nine other cities and a volume of state-bank and trust-company paper the New York association neither issued nor recorded. Kept apart, as Hoag's Boston archival work and the Comptroller's own 1908 report keep them apart, the interbank instrument was private, collateralized, and interest-bearing, redeemed at retirement; the public paper that reached the counter was a legally marginal substitute, tolerated in the emergency and withdrawn once it passed. Neither is a fiat currency in the sense Timberlake's phrase requires. Nor did the association's reserve equalization and certificate operations extend a claim to institutions outside the compact: the mechanism was many balance sheets supporting one another rather than one balance sheet standing behind them, redistributing member cash and member credit within a defined membership rather than supplying liquidity to a defined banking system on the association's own account.

Knickerbocker is the case Timberlake's framing accommodates least. It was a large trust used by the public and connected to the money market by an agent-clearing relationship; on the

¹¹²Timberlake 1984, 1–15; the "high-powered money" phrase is at page 8; the 1893 and 1907 figures are Timberlake's own calculations.

night of October 21, 1907, the association's rule was applied at Morgan's library to withhold support, because no promise had ever bound the association to an applicant who had never joined it. A central bank in fact would have been the one institution whose duties reached that far; the Clearing House recognized no such duty, and withholding support rested on precisely that membership boundary. That the Trust Company of America was rescued the following week by Morgan's private direction, drawing on federal deposits Cortelyou had placed, shows what the compact was and was not: capacity beyond its rolls required a different form of authority, personal and improvised rather than institutional. What the Federal Reserve Act added in 1913 was not the operational technique (much of it was already available) but national scope, a federal note obligation, Reserve Bank balance sheets on which the transaction could sit, and a publicly appointed board with statutory reporting duties. Even the "ownership" the Act created for member banks was constrained: Reserve Bank stock was compulsory for national-bank members, could not be transferred or pledged, carried a fixed cumulative dividend, and conferred none of the ordinary bundle of control and residual claims, with earnings beyond expenses, dividends, and the statutory surplus formula flowing to the United States.¹¹³ Function ran continuously from the clearing house into the Federal Reserve; authorization and accountability did not.

From Aldrich-Vreeland to the Federal Reserve Act

The first legislative response to 1907 kept the clearing house's method and gave it, for the first time, a statute. The Aldrich-Vreeland Act of May 1908 authorized national banks to form currency associations: groups of ten or more banks that could issue emergency currency against commercial paper and securities in a crisis, subject to a tax designed to force the currency's retirement once the emergency passed. The design was the loan certificate rewritten as public law, built on associations the panic had already shown at work; a Clearing House certificate had remained inside interbank settlement, while Aldrich-Vreeland currency was a federally authorized medium meant to circulate more broadly.¹¹⁴ What passed into the statute was the coalition form, collateral review, emergency character, and expectation of retirement, not the exact legal instrument, and not the membership boundary that had confined it. The emergency-currency provision was used only once, at the outbreak of war in 1914, and then allowed to lapse; its more consequential clause created the National Monetary Commission and charged it with recommending a permanent reform.

The Commission's work culminated in the Aldrich Plan, proposing a member-owned, banker-governed National Reserve Association with regional branches, rediscount authority, and an elastic currency: legal powers the Clearing House had never held. The Pujo committee gave the resulting governance dispute sharper force, tracing interlocking directorates and other mechanisms of concentrated financial control, including the Clearing House's own power over admission and exclusion.¹¹⁵ The Senate hearings that followed were not a binary contest between bankers and the state: witnesses debated the number and location of Reserve

¹¹³Federal Reserve Act 1913, sections 2, 5, and 7; Cannon 1910b, 5–19; Hoag 2016, 202–215; United States Comptroller of the Currency 1908, 68–79; Anderson, Hachem, and Zhang 2021, 8–31.

¹¹⁴United States Comptroller of the Currency 1908, 68–85.

¹¹⁵United States House Committee on Banking and Currency 1913, 55–89, 129–168; Jaremski 2018, 445–451.

Banks, the selection of directors, the role of the Treasury, the eligibility of commercial paper, and the terms on which state banks might join. Glass and Owen carried related but contested approaches through the two chambers, while the administration pressed for a central board with public appointment; conference and amendment produced an act in which regional corporate autonomy coexisted with Board powers over organization, examination, note issue, and policy.¹¹⁶

President Wilson signed the Federal Reserve Act on December 23, 1913. National banks had to subscribe capital to their district Reserve Bank, and eligible state banks could join. Each Reserve Bank had nine directors (three elected by stockholding banks, three more elected by member banks to represent commerce, agriculture, or industry, and three appointed by the Federal Reserve Board), and the central Board itself comprised the Secretary of the Treasury, the Comptroller of the Currency, and five presidential appointees confirmed by the Senate.¹¹⁷ This was hybrid governance, not a simple transfer to public control: member banks supplied capital and elected six of nine directors at each regional bank, while a publicly constituted Board held system-wide statutory powers and appointed the remaining three, with authority over organization, examination, reserve requirements within statutory bounds, note applications, and interdistrict relations.

Function	New York Clearing House	Federal Reserve Act system
Settlement	Local netting among members	District Reserve Banks within a national statutory system
Reserve mobilization	Temporary pooling by member resolution	Required reserve deposits at Reserve Banks
Emergency credit	Certificates transferring credit among members	Reserve Bank discounts of eligible paper
Currency	Ad hoc checks and scrip at the legal margin	Federal Reserve notes, obligations of the United States
Supervision	Private member examination alongside the Comptroller	Federal examination and Reserve Bank oversight
Reach and governance	City membership; member committees	National districts; member-capitalized Reserve Banks under a public Board

The table describes institutional location, not a claim that every function passed on the same day in finished form; Reserve Banks had to be organized and opened, and private clearing

¹¹⁶Federal Reserve Act 1913, sections 2, 4, 5, and 10; United States Senate Committee on Banking and Currency 1913.

¹¹⁷Federal Reserve Act 1913, sections 2, 4, 5, and 10.

houses continued to operate alongside them. Settlement was the clearest continuity in method: the Act authorized Reserve Banks to receive member deposits and collect eligible items, extending the reduction of gross obligations to net balances that Cannon had described in New York to a national network.¹¹⁸ Reserve mobilization changed footing: Section 19 phased specified portions of member reserves into district Reserve Banks, resting on statute and the Reserve Banks' own balance sheets rather than a temporary crisis pool, though the original Act divided required reserves among a bank's own vault, its Reserve Bank, and, for a time, approved correspondents, rather than centralizing every dollar at once.¹¹⁹

Rediscount was a sharper break. A loan certificate had transferred existing member credit; Section 13 let a Reserve Bank discount eligible commercial paper endorsed by a member, placing the Reserve Bank itself on the transaction and creating a Reserve Bank asset and liability where the certificate had created neither.¹²⁰ Note issue changed most clearly in law: the checks and scrip of 1893 and 1907 had circulated as tolerated emergency substitutes, while Section 16 made Federal Reserve notes obligations of the United States, issued through Reserve Banks under statutory procedure and receivable for public dues: lawful currency that could now expand through ordinary institutional procedure as eligible assets entered the Reserve Banks, and contract as those positions matured.¹²¹ Supervision had already been hybrid before 1913, since the Comptroller examined national banks while the Clearing House examined members for its own purposes; the Act retained federal examination, authorized special examinations, and added Reserve Bank oversight without abolishing private association rules.¹²² Geographic scope expanded from a city compact to twelve statutory districts, membership compulsory for national banks and available to qualifying state banks: not a universal system, since nonmember state institutions remained and access to Reserve Bank credit still depended on membership, eligible paper, and institutional judgment, but a placement of much more of the banking system within a national legal structure.¹²³

Accountability changed substantially, though not absolutely. The Federal Reserve Board was publicly constituted, barred from bank officeholding, and required to report to Congress; at the district level, member banks remained stockholders and elected most directors.¹²⁴ Gorton describes the nineteenth-century clearing house in panic as an organization resembling a single firm and producing a form of deposit insurance: a functional resemblance that does not establish institutional identity.¹²⁵ The Clearing House coordinated and protected a defined coalition; the Federal Reserve Act created regional corporate balance sheets, lawful public currency, and a national supervisory board while preserving a large role for member banks, and stopped short of a modern, explicit guarantee against every run. What 1913 accomplished was a shift from private, member-authorized governance to statutory hybrid

¹¹⁸Federal Reserve Act 1913, section 13; Cannon 1910b, 30–40.

¹¹⁹Federal Reserve Act 1913, section 19; Hoag 2016, 202–222.

¹²⁰Federal Reserve Act 1913, section 13; Hoag 2016, 216–222.

¹²¹Federal Reserve Act 1913, section 16; United States Comptroller of the Currency 1908, 73–85.

¹²²United States Comptroller of the Currency 1908, 60–68; Federal Reserve Act 1913, sections 11 and 21.

¹²³Federal Reserve Act 1913, section 2.

¹²⁴Federal Reserve Act 1913, section 10; Hoag 2016, 202–222; Jaremski 2018, 445–451.

¹²⁵Gorton 1985, 277–283.

governance, with national scope and stronger public accountability than the compact could supply: not the victory of one pure principle, but a durable allocation of authority among public officers, statutory corporations, and member banks. Describing the 1913 system as if it already possessed every later central-bank power would exaggerate the break with the Clearing House and obscure the experimental quality of the original compromise.

Coda

The New York Clearing House governed by agreement, and that government was real. In 1873 it joined interbank credit to reserve reallocation and then wrote emergency practice into rule. In 1907 it examined banks, forced out compromised management, authorized roughly one hundred million dollars in settlement paper, coordinated a partial suspension, and controlled what the public knew about its own members. A bookkeeping convenience could not have done any of that.

The instruments show what kind of government it was. Gold certificates economized on the movement of assets already held. Loan certificates turned prior consent into transferable credit under a committee's judgment. Public emergency media appeared only when the currency shortage outran the settlement room, and stood on weaker legal ground than either. Authority was strongest exactly where the underlying relation was clearest: among banks that had joined, submitted to examination, and promised in advance to accept the result.

That same relation explains the exclusion. Knickerbocker had accepted no discipline and held no claim on the association, and when its bankers declined support, the consequences reached far past the room that made the decision. No bad faith is required to see this: continuous examination and advance consent made rapid aid possible for insiders, and the identical machinery gave outsiders nothing to stand on. A coalition can keep faith with the banks that built it while still exercising real power over the ones it never answered to.

The Federal Reserve Act answered that problem with a national statute, not a purely public bank or an immediate guarantee for every institution. Member-capitalized Reserve Banks elected most of their own directors; a publicly appointed board supplied central supervision, issued lawful federal notes, and reported to Congress. State institutions could still remain outside it, and eligible paper and Reserve Bank judgment still constrained who received support; 1913 did not make protection universal. What changed was the source of the authority making these decisions, and who it answered to.

Netting, monitoring, collateral review, and coordinated liquidity are a history of continuity between the two institutions; federal note obligations, Reserve Bank balance sheets, national reach, and congressional accountability are a history of discontinuity. The Federal Reserve inherited techniques without inheriting the constitutional form that produced them, and the Clearing House performed central-bank-like functions for sixty years without ever holding a central bank's charter. Its authority was contractual jurisdiction, binding on those who signed and reaching no further by right, however far its consequences traveled. The Federal Reserve's was a statutory remit, created by Congress, answerable to it, and extending, by law rather than by promise, across a national system the private room on Cedar Street was never built to hold.

Works Cited

- Anderson, Haelim; Hachem, Kinda Cheryl; Zhang, Simpson. *Reallocating Liquidity to Resolve a Crisis: Evidence from the Panic of 1873*. NBER Working Paper w28870 (2021). DOI 10.3386/w28870.
- Bagehot, Walter. *Lombard Street: A Description of the Money Market*. London: Henry S. King & Co., 1873.
- Calomiris, Charles W.; Schweikart, Larry. "The Panic of 1857: Origins, Transmission, and Containment." *Journal of Economic History* 51, no. 4 (December 1991): 807–834.
- Cannon, James Graham. *Clearing Houses: Their History, Methods and Administration*. New York: D. Appleton and Company, 1900.
- Cannon, James Graham. *Clearing House Methods and Practices*. Publications of the National Monetary Commission, vol. 6. Washington: Government Printing Office, 1910a.
- Cannon, James Graham. *Clearing House Loan Certificates and Substitutes for Money Used During the Panic of 1907*. Publications of the National Monetary Commission, vol. 5. Washington: Government Printing Office, 1910b.
- Cleaveland, John. *The Banking System of the State of New York*. New York, 1857.
- Columbia University, Rare Book and Manuscript Library. *New York Clearing House Association Records, 1853–2006: Finding Aid*.
- Gibbons, James Sloan. *The Banks of New-York, Their Dealers, the Clearing House, and the Panic of 1857*. New York: D. Appleton and Company, 1858.
- Gorton, Gary. "Clearinghouses and the Origin of Central Banking in the United States." *Journal of Economic History* 45, no. 2 (1985): 277–283.
- Gorton, Gary; Mullineaux, Donald J. "The Joint Production of Confidence: Endogenous Regulation and Nineteenth Century Commercial-Bank Clearinghouses." *Journal of Money, Credit and Banking* 19, no. 4 (November 1987): 457–468.
- Gorton, Gary; Tallman, Ellis W. *Fighting Financial Crises: Learning from the Past*. Chicago: University of Chicago Press, 2018.
- Hoag, Christopher. "Clearinghouse Loan Certificates as Interbank Loans in the United States, 1860–1913." *Financial History Review* 23 (2016).
- Jaremski, Matthew S. "The (Dis)Advantages of Clearinghouses Before the Fed." *Journal of Financial Economics* 127, no. 3 (2018): 435–458.
- Moen, Jon R.; Tallman, Ellis W. *Liquidity Creation without a Lender of Last Resort: Clearing House Loan Certificates in the Banking Panic of 1907*. Federal Reserve Bank of Cleveland Working Paper 10-10 (2010). Citable text of record: *Journal of Financial Stability* (2011).

New York Clearing House Association. *Constitution of the New York Clearing House Association, with Amendments; Also Clearing House Rules, Scale of Fines and Holiday Laws of New York State*. New York, 1898.

Sprague, O. M. W. *History of Crises Under the National Banking System*. Publications of the National Monetary Commission, vol. 20. Washington: Government Printing Office, 1910.

Timberlake, Richard H., Jr. "The Central Banking Role of Clearinghouse Associations." *Journal of Money, Credit, and Banking* 16, no. 1 (February 1984): 1–15.

United States. *Aldrich-Vreeland Act*. Public Law 60-169, 35 Stat. 546 (May 30, 1908).

United States. *Federal Reserve Act*. Public Law 63-43, 38 Stat. 251 (December 23, 1913).

United States House Committee on Banking and Currency. *Report on the Concentration of Control of Money and Credit*. Washington: Government Printing Office, 1913.

United States Office of the Comptroller of the Currency. *Annual Report of the Comptroller of the Currency, 1893*. Volume 1. Washington: Government Printing Office, 1893.

United States Office of the Comptroller of the Currency. *Annual Report of the Comptroller of the Currency, 1908*. Washington: Government Printing Office, 1908.

United States Senate Committee on Banking and Currency. *Banking and Currency: Hearings on H.R. 7837 (S. 2639)*. 3 vols. Senate Document 232, 63rd Congress, 1st Session. Washington: Government Printing Office, 1913.

Wicker, Elmus. *Banking Panics of the Gilded Age*. Studies in Macroeconomic History. Cambridge and New York: Cambridge University Press, 2000.