The Paper Column
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Emergency Currency:
The Aldrich-Vreeland Act & Series of 1882 and 1902 Date Back National Bank Notes



Figure 1. Series of 1902 date back note. New design features were the modified security clause on the face that was altered to read "or other securities" and the prominent dates on the back.

ELASTICITY

A crippling problem with national bank currency was that the supply of it was limited to a fixed percentage of the capitalization of the national banks. Consequently the volume of it in circulation did not respond to the varying demands of business cycles. This deficiency went critical during the periodic money panics that gripped the nation because there was no mechanism by which national banks could temporarily pump needed currency into the economy to maintain liquidity and to offset hoarding. This problem doomed national currency so the elastic Federal Reserve currency system was invented to replace it.

When demand for money was great, a business applied to a bank for a loan to fuel its needs. The loans were provided in the form of money that customers had deposited in the bank and national bank notes issued by the bank. If the officers of the bank wanted to increase the supply of money to loan, they had to hope customers would increase their deposits or they had to encourage shareholders to increase the capital of the bank so they could apply for more national bank notes.

However, just as the need was greatest, other demands including hoarding were competing for the same dollars that depositors might have or for additional investment dollars that shareholders held. The

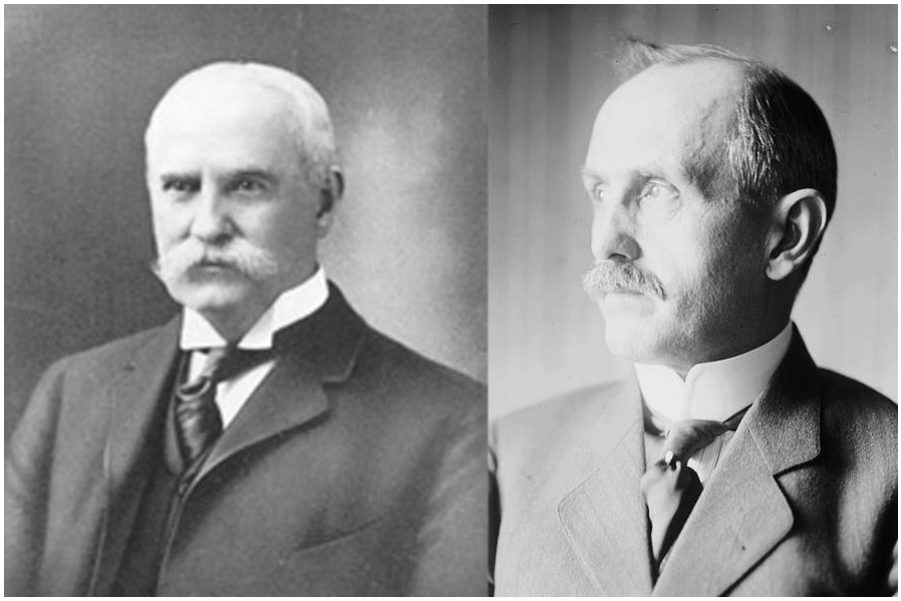


Figure 2. Nelson W. Aldrich (left), who served from 1881 to 1911 and often referred to in the press as the General Manager of the Nation, was a Republican Senator from Rhode Island and principal author of the Aldrich-Vreeland Act. President Theodore Roosevelt signed the act the night it passed without a single favorable Democratic vote (Library of Congress photo). Republican Representative Edward B. Vreeland (right) of New York from 1899 to 1913 co-sponsored the Aldrich-Vreeland Act (Wikipedia photo).

impulse of some shareholders was to have the bank sell its bonds so that their money could be freed up for more lucrative pursuits. These realities limited and even reduced the supply of national currency available for loans at exactly the time when demand for it was greatest.

The result was a monetary stringency characterized by a scarcity of currency when it was needed the most. This caused interest rates to soar and business activity to unnecessarily contract. Business and bank failures spiraled out of control in the extreme.

A mechanism was needed that would allow the bankers to accept sound instruments of debt from borrowers that could be used as short-term collateral for additional short-term issuances of national bank notes. The new currency in turn could be loaned to satisfy the temporary increase in demand for money.

The mechanism had to allow the money supply to increase when required, but force it to decrease when not needed. The counterbalance could take the form of an extra tax targeted on the increased circulation.

The concept that emerged was the following. Interest rates rose as the demand for money increased so bankers could charge more interest on additional national bank notes that they could draw against short term paper deposited as security. If the emergency increase in national bank note circulation was taxed at a higher rate, businesses could afford to pay the higher interest rates and the bankers could in turn afford to pay the higher tax on the notes. However as business demand for currency fell, interest rates also fell, so the bankers would reduce their additional emergency national bank note supply to avoid the higher tax.

THE ALDRICH-VREELAND ACT

Congress passed the Emergency Currency Act modeled on these principles and it was signed into law May 30, 1908. The act is commonly known as the Aldrich-Vreeland Act after its sponsors. The Aldrich-Vreeland Act was an experiment. It was originally set to expire June 30, 1914, but was extended to June 30, 1915, by Section 27 of the Federal Reserve Act of December 23, 1913.

The Aldrich-Vreeland Act provided a mechanism that would permit banks to use securities other than U. S. government bonds to obtain short-term increases in their circulations. Two types of entities could apply for the additional currency: (1) groups of at least 10 banks formed into national currency associations and (2) individual banks. The following distills the workings of the act without detailing all the restrictions.

National currency associations were authorized to accept securities from a member bank and then to apply to the Comptroller of the Currency for additional circulation for that member bank. The association could apply for additional national bank notes having a value of no more than 75 percent of the cash value of the deposited securities or short term commercial paper. However if the deposited assets were acceptable local or state government bonds, the association could apply for national bank notes having a value of 90 percent of the market value of the bonds.

Individual banks could apply directly to the Comptroller of the Currency for additional notes to be secured by state or local bonds. In such cases, the bank could receive notes up to 90 percent of the market value of the deposited bonds.

The total amount of emergency currency that could be issued under this act was set at $500,000,000. This amount was subsequently raised to over $1 billion by a hastily passed amendment dated August 4, 1914, immediately following the outbreak of World War I in Europe.

The tax structure was as follows. The tax on the ordinary circulation of a bank was set at 1/2 percent per year if it was secured by 2 percent U. S. bonds, or 1 percent per year for U. S. bonds paying more than 2 percent. However the tax on the emergency circulation was set at a rate of 5 percent per year for the first month and 1 percent per year for each additional month up to a maximum of 10 percent per year. Obviously, there was little incentive to keep the emergency notes in circulation after the need for them had passed.

DATE BACK NOTES

The Aldrich-Vreeland Act explicitly addressed a number of details pertaining to all national bank note issues. The following denominations were authorized: 5, 10, 20, 50, 100, 500, 1000 and 10,000. The security clause on the faces had to state "secured by United States bonds or other securities." Highly significant was that the Comptroller of the Currency had to create a stockpile of such notes equal to fifty percent of the capital stock of each national bank as soon as practicable. These requirements meant the Bureau of Engraving and Printing had to alter the security clauses on all the existing Series of 1882 and 1902 face plates, design and prepare date back plates, and print the enormous quantity of notes called for.

Passage of the Aldrich-Vreeland Act heralded the date back designs. Secretary of the Treasury George B. Cortelyou addressed this change in his 1908 annual report (Cortelyou, 1908, p. 45-46). The italics are mine.

> It was deemed advisable, also, that the backs of these notes should bear some suitable inscription connecting them with the new act and differentiating them from previous issues. This was readily accomplished on the plates of the series of 1902 by adding the numbers "1902-1908," *but as the series of 1882 had backs of an inartistic design, expensive to print, and bore the coats of arms of the different States, making it necessary to carry in stock a full supply for each State, it was considered to be an opportune time to prepare a new design for these backs,* and new plates were accordingly prepared. This work commenced immediately after the passage of the act, the first back plate altered in accordance therewith having been send to press June 5, and the first delivery of the new currency made to the Comptroller of the Currency June 15, showing commendable promptness on the part of the bureau in the prosecution of the work.

Work commenced at the Bureau immediately after passage of the act. Nearly 10,000 face plates had to be altered and $500,000,000 in notes printed as soon as possible (Ralph, 1908, p. 4). The first altered face went to press on June 5, 1908, and deliveries to the Comptroller began on June 15 consisting of 5-5-5-5 Series of 1902 blue seal date backs, the first of which was the A1-1-A,B,C,D 5-5-5-5 sheet for The First National Bank of Beaver City, Utah (9119). The first Series of 1882 date back sheets were delivered to the Comptroller on August 1, 1908, including 5-5-5-5 and 10-10-10-20 sheets.

The last of the Series of 1902 red seals were delivered December 15, 1908. Regular production of Series of 1882 brown backs ceased in on March of 1908, with the exception of the 10-10-10-10 combination which ceased on September 4, 1908. One late 10-10-10-10 brown back delivery to the Comptroller's office occurred on March 22, 1909.

The dimensions of the crash printing effort are revealed by the statistics for the fiscal year July 1, 1908 to June 30, 1909, during which the Bureau delivered a combined total of 19.6 million sheets of Series of 1882 and 1902 date backs having a face value of $745 million (Ralph, 1909, p. 11).



Figure 3. Secretary of the Treasury George B. Cortelyou was Secretary of the Treasury when the Aldrich Vreeland Act was passed (Wikimedia photo).

The production of the Series of 1882 and 1902 date backs was accomplished rapidly by altering the existing face plates by adding the "or other securities" clause and advancing the plate letters. For example, a 10-10-10-20 red seal plate with letters A-B-C-A was altered to carry plate letters D-E-F-B along with the revised security clause. The dates, 1902-1908, were added to the Series of 1902 back plates. In contrast new Series of 1882 back plates were designed using only the borders from the previous brown back plates surrounding the 1882-1908 date. Both the Treasury and bank sheet serials reverted to 1 for every sheet combination issued by every bank. No $500, $1000 or $10,000 notes were ordered by the banks, so plates for those denominations never were prepared for either the Series of 1882 or 1902.

Modification of the securities clause on the $20 Series of 1902 notes required a cute repair. Notice that they had to remove the word "The" from the flag-like flourish in front of the letter U in United in order to add the "or other securities" clause. This was just another annoying thing that had to be dealt with by the siderographers who had to alter the plates.

Section 11 of the Aldrich-Vreeland Act stated:

> * * * the Comptroller of the Currency may issue national bank notes of the present form until plates can be prepared and circulating notes issued as above provided: Provided, however, That in no event shall bank notes of the present form be issued to any bank as additional circulation provided for by the Act.

Consequently, the Comptroller could continue to issue existing red seals and brown backs until stocks ran out unless the bank specifically obtained emergency circulation under this act. Notice that all the existing banks eventually received date backs whether they issued emergency currency or not.

EMERGENCY CURRENCY

The first national currency association was organized in New York on July 18, 1908 (Comptroller of the Currency, 1936). However, the fact is no use was made of emergency currency before the original life of the Aldrich-Vreeland Act expired on June 30, 1914. When the provisions of the Aldrich-Vreeland Act were extended for another year to June 30, 1915, no one expected the banks to take advantage of it.

As of January 1, 1914, 21 national currency associations had been formed but no applications were submitted for additional currency although periods of money stringency had existed in sections of the country that would have made an issue desirable (Kane, 1922, p. 445). The deterrent was the high tax on

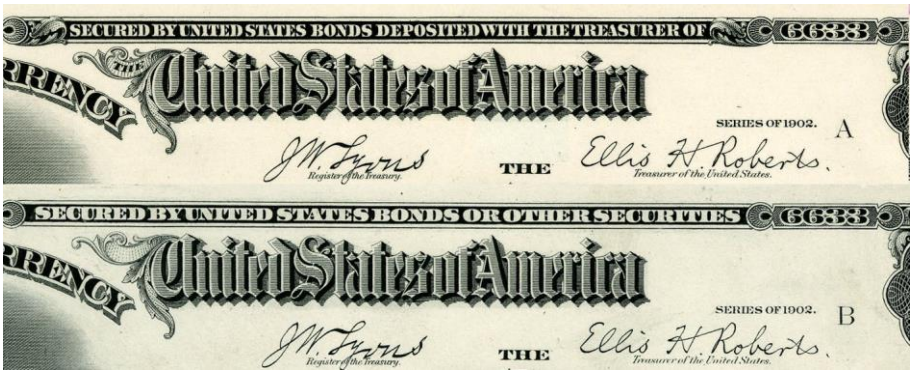


Figure 4. The plates were altered to carry the "or other securities" clause (bottom) when the Series of 1882 and 1902 face plates were altered into date back faces.

such currency. Kane states that occasional applications had been received for the emergency currency by individual banks willing to deposit bonds, but none was issued.

World War I broke out in Europe at the beginning of August, 1914, and the situation changed radically. Kane (1922, p. 445-447), who at the time was serving as Deputy Comptroller, provides an insider's view of what transpired.

> Immediately preceding the declaration of war the resources of the banks in New York City had been heavily drawn upon to meet the demands incident to large exportations of gold to Europe and sales on the New York Stock Exchange of enormous amounts of American securities for foreign account. Further shipments of gold and sales of securities were anticipated. To prevent a general demoralization of the market the stock exchange was closed on the morning of July 31, 1914, and remained closed until December 12.
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> * * *
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> The New York Clearing House statement for August 1, 1914, showed that the reserves of the New York banks had been reduced $43,599,500 below the amount held the preceding week and that the deficiency in reserves amounted to $17,425,750. In May, June and July nearly $100,000,000 of gold had been exported to Europe.
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> * * *
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> At this juncture the Aldrich-Vreeland emergency currency measure proved of great aid to the financiers and bankers. Although this law had been in existence since immediately following the panic of 1907, it had never been utilized and probably never would have been had it not been for the grave emergency created by the European war.

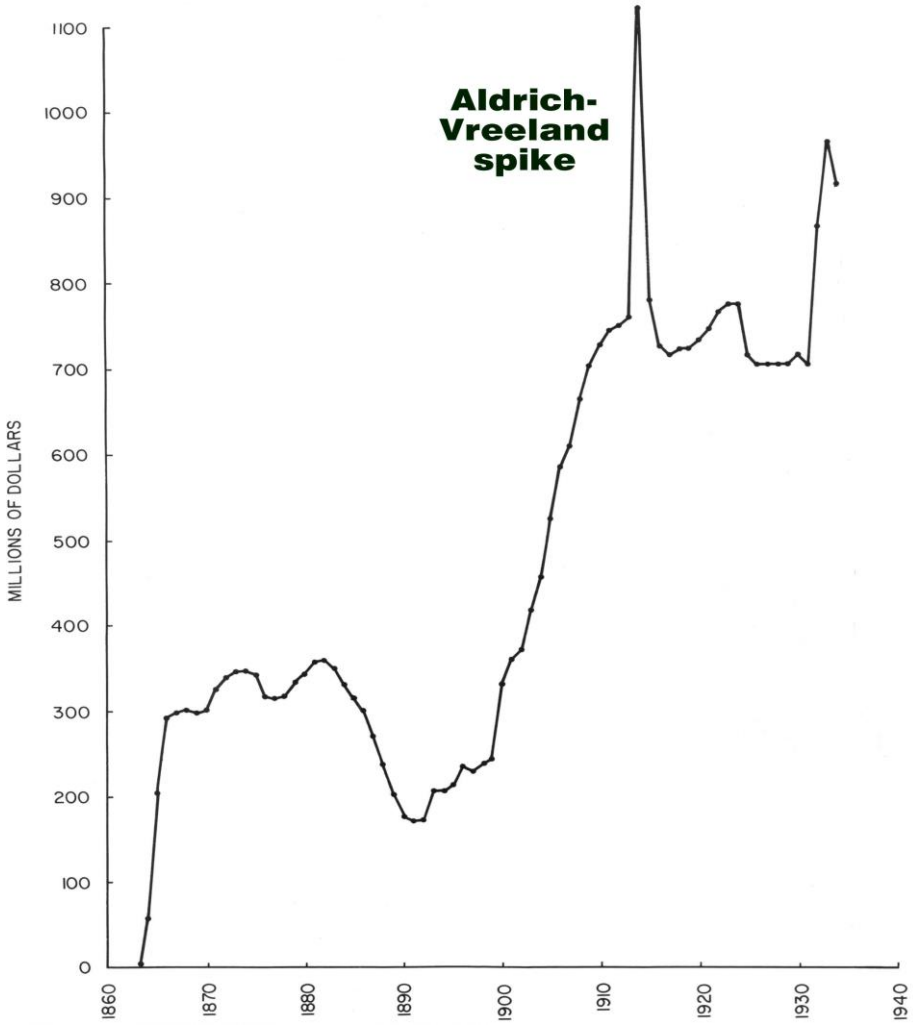


Figure 5. Value of outstanding national bank notes during the 1863-1935 note-issuing era. The Aldrich-Vreeland spike in circulation is obvious. Data from O'Conner (1936, p. 833).

The Secretary of the Treasury realized the gravity of the situation, and on August 3 announced through the press that the Treasury Department was prepared to immediately issue to national banks in New York City $100,000,000 of additional currency authorized by this act.

To facilitate the issuance of emergency currency, Congress, under date of August 4, 1914, amended the Act of May 30, 1908, authorizing the Secretary of the Treasury, in his discretion, to waive the provision in the original act, restricting the issuance of additional currency to national banks which had outstanding bond secured circulation equal to forty per cent. of their capital stock. The act was further amended to increase the amount of currency which a bank was authorized to issue from one hundred per cent. of capital and surplus to one hundred and twenty-five per cent. of capital and surplus, and repealed the provision limiting the total issue of such currency to $500,000,000.

Immediately following these amendments to the law additional currency associations were rapidly formed in different sections of the country. On October l, 1914, forty-four of these associations had been organized, covering nearly every State. The number of national banks composing these associations aggregated 2102 and their capital stock and surplus amounted to $1,197,771,000. The total amount of emergency currency issued aggregated $382,502,645.

The situation was further relieved by the New York Clearing House Association which, on August 3, 1914, commenced the issuance of clearing-house loan certificates. Between August 3 and October 15 following, $124,695,000 of these certificates were issued. The last of these certificates were cancelled on November 28, 1914, and on July 8, 1915, the entire Emergency Currency issues had been retired, except $171,703.11 issued to the First National Bank of Uniontown, Pa., which had failed and had been placed in the hands of a receiver January 18, 1915. After that date this emergency currency was provided for by the deposit of lawful money.

A revised version of the emergency currency issues is provided by the Comptroller of the Currency (1936, p. 832-833).

There were 45 national currency associations organized during the life of the Emergency Currency Act with a total membership of 2,197 banks. Forty-one of these associations, having a total membership of 2,129 banks, applied for and received additional circulation for 1,359 banks, or 61.85 percent of the total of such banks.

* * *

Securities deposited by the 1,359 banks with the 41 currency associations amounted to $585,864,391.94 for which they received additional circulation amounting to $385,533,715. In addition, eight banks, one not a member of any currency association received $910,500 additional circulation by depositing with the Treasurer of the United States, State or other municipal bonds permitted under the act. The total of all issues, therefore, was $386,444,215, representing 77.10 percent of the amount limited by the original act, and 25.87 percent of the amount ($1,493,902,390) which could have been issued under the amendment of the act of August 4, 1914. * * * The first application for additional circulation was approved August 3, 1914, * * * and the last application on February 5, 1915. * * * The first application for retirement was approved September 23, 1914, just 51 days after the first issue was approved. By July 1, 1915, all but one bank, which had become insolvent, had deposited the necessary amount of lawful money to retire their additional circulating notes.

The tax collected on additional circulation amounted to $2,977,066.73.

Some slightly different and additional statistics were provided by Williams (1915, p. 44-45).

The last issuance of such currency was made on February 12, 1915. * * * The first issue of this emergency currency was made August 4, 1914, to banks in New York City. * * * The largest amount issued in any one week was for the week ending August 15 - $67,978,770. * * * The maximum amount outstanding at any one time appears to be $363,632,080, on October 24, 1914. * * * The largest amount retired in any one week was $45,144,798, which was redeemed in the week ending December 12, 1914. * * * This emergency currency was issued to 1,363 banks in 41 States, including the District of Columbia. * * * The only States in which emergency currency was not issued were the States of Maine, Vermont, Rhode Island, Delaware, South Dakota, Montana, Wyoming, Idaho, and Nevada. * * * Of the $386,444,215 emergency currency authorized to be issued, 57 1/2 per cent was secured by commercial paper, 14 per cent by State and municipal bonds, 28 per cent by miscellaneous securities, and approximately one-half per cent by warehouse receipts.

The net impact of the emergency currency issues in 1914 and 1915 was to drive the total outstanding value of national bank notes to an all-time record high. The national bank note supply

ballooned from about $700 million to $1.1 billion by the end of October, 1914. This circulation quickly contracted as the stringency passed owing to the high tax on the emergency issues.

A list of the 45 national currency associations is presented in U. S. Treasury (1915, p. 55-56).

DATE BACK REISSUES

If you examine the data set compiled by Louis Van Belkum, which is the source for the national bank issuance data in the Kelly and Hickman-Oakes catalogs, you occasionally will find a reissue entry such as the following.

The Arizona National Bank of Tucson, Arizona (4440)
Series of 1902 blue seal date backs:
10-10-10-20 $130,000 worth; serials 1 to 2600
Series of 1902 blue seal date back reissues:
10-10-10-20 $41,900 worth; serials not available
Series of 1902 blue seal plain backs:
10-10-10-20 $450,000 worth; serials 2601 to 11600

What happened, of course, is that the officers of the Tucson bank returned $41,900 worth of their emergency currency sheets to the Comptroller of the Currency and they were reissued to the bank at a later date. The reissues were a direct consequence of contracting their circulation after receiving an emergency issue of notes under the terms of the Aldrich-Vreeland Act following the outbreak of World War I in 1914

The effect of the reissues was to delay shipments of new notes for almost 2 years. Consequently The Arizona National Bank of Tucson continued to use Series of 1902 date backs until June 1920. Under normal circumstances its Series of 1902 date back printings would have run out a few years earlier.

DISCUSSION

Passage of the Aldrich-Vreeland Act on May 30, 1908, provided a mechanism that introduced elasticity into the national currency supply. However, only the gravest financial crises could trigger applications for emergency currency because the tax imposed on the emergency currency was too burdensome. The result was that the provisions of the act never were invoked by the banks to provide elasticity as needed during the normal annual business cycle or the longer-term recession-inflation cycles that plagued the economy. Consequently the national currency supply remained inflexible.

The fact was that no currency ever would have been issued under the terms of the Aldrich-Vreeland Act was it not for the extreme financial crisis precipitated by the outbreak of World War I.

Rather than tinker further with national bank currency, Congress established the Federal Reserve System in 1913 with its elastic currency, a move that ultimately rendered national bank currency obsolete.

The Aldrich-Vreeland Act required that date back notes be prepared for every bank in the country regardless of whether they applied for emergency currency or not. However there was no legally mandated change in the currency once the Aldrich-Vreeland Act expired in 1915. Consequently, the date back notes in the Comptroller of the Currency's inventory continued to be sent to the banks after the act expired. Furthermore, the "or other securities" face plates and existing stockpiles of pre-printed date back feed stock also continued to be used to print new notes at the Bureau of Engraving and Printing after expiration (Ralph, 1915; McAdoo, 1915; Malburn, 1915).

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Figure 6. Section 11 of the Aldrich-Vreeland Act required inclusion of the "or other securities" clause on the faces of the date back nationals; however, changing the backs to carry dates was carried out on the initiative of Secretary of the Treasury Cortelyou who took the opportunity to scrap the inartistic brown backs with their state coats-of-arms, which required maintaining costly inventories for each state.

