

# THE RECOVERY FROM THE GREAT PANIC OF 1873

Roger W. Babson, the Well-known Statistician, Tells of the Business Epochs That Followed That Period of Depression.

Our Nation's Four Great Business Epochs After the Recovery from the Panic of 1873.

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At the close of the last article we left our Nation in the throes of the severe depression of 1873. It will be remembered that the real panic began with Black Friday in the Fall of 1873, and continued into 1874; but this was so sharp and sudden that there came a quick rebound in 1871, which lasted into 1872.

As stated in this previous article, all of our severe crises have consisted of two sharp movements about three years apart, followed by about three years of depressed business. Therefore, although the first and in many ways the severest blow of the "Panic of 1873" came in 1873 and 1874, the second and final blow did not come until 1875, which completed the forced liquidation begun three years previous.

Although the second blow is often not as severe as the first, yet the business is less able to withstand the second pressure, and the apparent disaster is much greater. Therefore the year 1875 was one of great financial and industrial hardship.

In the Fall of 1872 the trouble really began, but it was first brought to an acute stage on April 26, 1871, when the Atlantic Bank failed. A flood of stocks was sold on the New York Stock Exchange, prices fell with great rapidity, and the market showed an almost continual decline until the Fall of the year. In the late Summer there was a slight rally, but this was simply the lull before a storm; and in September, 1873, the New York Warehouse Company, a large and apparently prosperous concern, went to the wall. The New York Mill and Lumber Co. failed on the 15th of September, and Jay Cooke & Co., a great banking house of that day, closed on the following day.

The entire financial community was then in a state of great excitement, and confidence seemed to vanish. The New York Stock Exchange closed its doors on the 20th and did not open them until the 20th, while about 20 per cent. interest was exacted for the use of money for a short period during the worst of the trouble.

People often say to me, "There is no need for me to sell stocks now in order to have money to use during panics, because I have such splendid banking connections and can readily borrow if there comes a great break in the market." In the two severe panics which I have lived through this is a fallacy. Not only is it impossible to borrow money on the best of collateral, but one is fortunate if he has money in a bank which does not feel hurt to have it withdrawn.

I remember a friend who tramped the streets of Boston during the panic of 1873 trying to borrow money on the New York State Government bonds, and every bank turned him down. In fact, the only source of supply was the Treasurer of the American Sugar and Refining Company, which made the bankers, by which he was employed, a loan on these Government bonds, although, of course, at a rate of interest commensurate with the service rendered.

## Effects of the Panic of '73.

Another feature which this panic illustrates is that the most critical time did not come in November, as many have supposed; but rather a month or two earlier; and in this case the worst of the storm was over by November. It took many months and, in fact, many years for banks, corporations and investors to recuperate, while railroads, like the Northern Pacific, the New York, Chicago & St. Louis, and others were thrown into bankruptcy, from which they did not emerge for some time.

In addition to the "killed" there were a great many wounded, and as is often the case after a second major strike the community, it took some years to recover. This is shown most forcibly by the following figures on "Failures," which I herewith submit, indicating that they continually increased from 1873 to 1878, or for five years:

Year	Number	Liabilities	Business
1873	5,329	125,250,000	37
1874	5,839	125,250,000	37
1875	7,774	160,000,000	1.21
1876	9,045	160,000,000	1.22
1877	8,872	160,000,000	1.29
1878	10,247	160,000,000	1.29
1879	6,658	68,150,000	35
1880	4,755	67,702,000	35

This table very well expresses in figures the condition existing during these years, as there was no improvement in business until 1878 or 1877. The following table on "lean production" illustrates the condition of the falling off in manufacturing and structural business and the subsequent recovery:

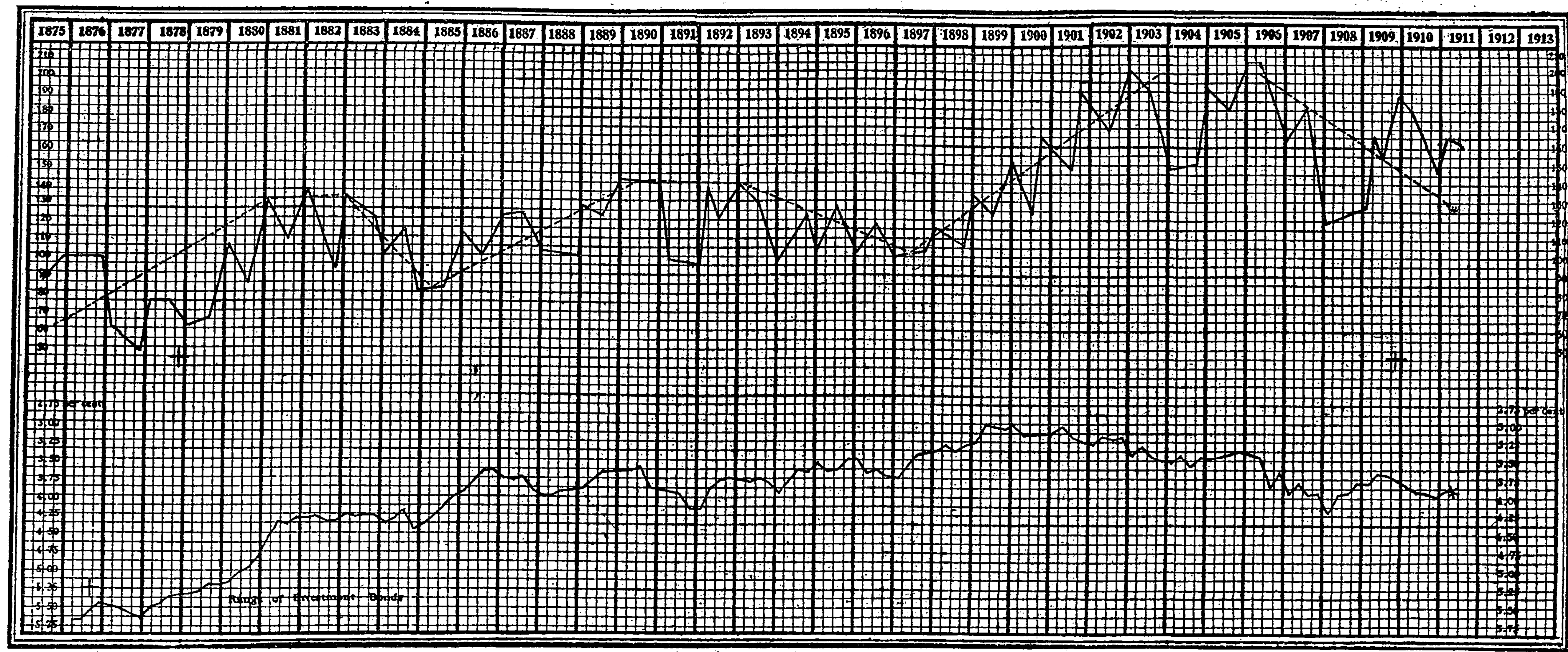
Year	Iron (Tons)
1873	2,350,000
1874	2,400,000
1875	2,400,000
1876	2,400,000
1877	2,400,000
1878	2,400,000
1879	2,400,000
1880	2,400,000

As to the decline in general business, this is best shown by the figures on "bank clearings," as follows:

Year	Total Bank Clearings
1873	\$35,491,032
1874	35,000,000
1875	35,000,000
1876	35,000,000
1877	35,000,000
1878	35,000,000
1879	35,000,000
1880	35,000,000

New railroad construction decreased from about 7,000 miles in 1873 to about 1,700 in 1875, and this is only an illustration of almost every line of business. Of course, this was partly due to labor and granger troubles during this period. This is the time when the Inter-State Commerce Commission was originally formed, which every one prophesied would put an end to new railroad construction. On reading the newspapers and magazines of that day we find the same arguments used by railroads and investors as have been used during the discussion of the "Rate Decision" the past two years, and there is a considerable similarity between the two periods. In the '70s business was dull, profits were small, and the public looked about for some remedy. As is the case to-day, shippers felt that the railroads were the cause of the depression and, therefore, sought to regulate their rates.

In fact, a study of history shows me that the public always forgets that our business epochs are as natural as the tides of the ocean, and they continually endeavor to change conditions by tinkering with the tariff or legislating against the railroads, or else making some similar unimelligent move. Moreover, in making this remark I am not speaking in



This is a plot of relative price movement of ten representative high-grade stocks and five representative high-grade bonds. The basic law that action and reaction are equal, when areas are considered, is well illustrated here. Especially does it show that while the stock market sometimes discounts conditions, it does not always do so. The dotted line shows the major cycles, on account of the maturing feature of bonds the bond line shows the plot of bond yields inverted, which indicates the varying cost to the investor. Note that the bond market does not rise and fall simultaneously with the stock market except in rare instances.

favor of an unjust tariff or of giving the railroads a free hand, believing that progressive legislation is needed along both of these lines. I do, however, object to the purpose of such legislation, namely, to regulate artificially a natural cause and effect; and for our Washington politicians to endeavor to improve conditions by such means is utterly foolish. Nevertheless, throughout the country's history this has always been practiced, although such legislation has almost invariably resulted in making the situation worse than it was before. Thus in the '70s, instead of the railway rate agitation improving the position of the farmers and shippers, it simply aggravated the troubles and prolonged the depression. In other words, although it was entirely right and proper to form the Inter-State Commerce Commission, it should not have been formed at that time and under the unsatisfactory political conditions then existing.

However, as the sun always shines after rain, so conditions began to improve in 1877, and by 1878 there was a better feeling throughout the nation. As to the stock market at that time, and through to 1882, I quote from a well-known authority, as follows: "Although twenty selected stocks had declined \$76 a share since 1850 and individual stocks were down from \$14 to \$110 a share, a change in outside conditions was then ushered in. Call money was considerably low, the trunk line railroads made a new agreement in June, and such evils as prevailed in the business community seemed near their end. The turn had come. A powerful speculative combination was formed in Wall Street and the buying of stocks for a bull campaign began. Better times trod upon the heels of 1877. Confidence returned slowly, but it did return, and the tide of prosperity rose steadily until its inspiration had penetrated every city and hamlet in the country. The fertile lands of the West and South brought forth bountiful harvests, and ocean commerce expanded under the stimulus of good crops.

The features of this golden period in our affairs, which broke all records. During four years, ended June 30, 1881, foreign trade yielded an average balance of more than \$220,000,000 per annum in favor of the United States, a marvel to which our people were not accustomed. A number of new railroads were required; building broke out afresh and once more surpassed all precedent, the miles of new line rising from 2,605 in 1878 to 11,569 in 1882. The transportation of material for railroad contractors and a larger volume of goods and grain led to a striking improvement in the earnings of all lines.

"Meanwhile mills and factories were busy, and furnaces could hardly meet with promptitude the orders for metal. The tonnage of pig iron turned out in 1882 was the enormous total of 4,225,000, or nearly three times the record of 1878. In the sale of goods merchants reaped large profits. Farmers were paying their debts. Energy pervaded the entire commercial world. The mines were taxed to the utmost and the output of coal was nearly twice that of the dull years which preceded the boom.

"Betterment in the stock market was delayed by strikes and riots at Pittsburgh and elsewhere in 1877; but the time was ripe for a bull movement in stocks, and after a few months the bull party had the situation under control. Stocks began their rise in the Spring of 1878, and in 1879 men of means awoke suddenly to the fact that railroads were of value as investments after all, and a marvelous buying of securities sprang up, which electrified the financial world and led to a boom in prices. A powerful factor in behalf of higher prices was the undoubted fact that the heart-breaking wreck and reconstruction of corporate finances had been finished for the time being. Rate wars had ceased and earnings were on the upward grade. Money was fairly low, barring the customary furries at the planting and harvest seasons; and time loans could be negotiated at an average of 4 to 5 per cent. As soon as the boom started there was no hesitation on the part of investors and traders. Orders to buy poured into every brokerage office in a flood; and brokers were in danger of being utterly swamped with business. Stocks rushed upward with a whirl until November, 1880, especially the stock exchanges were the scenes of furious trading, such as brokers had never witnessed. Fortunes were made by every one connected with Wall Street. Scarce a cloud flicked the sky for two or three years, and the swelling tide of the boom rolled on practically unchecked until 1881. A number of striking railroad combinations were arranged by Jay Gould and others. The buying of stocks for control, stock dividends, rights on new issues, and strong manipulation by operators, promoted speculation and kept it at the boiling point. In

1880 stock dividends were declared to the amount of more than \$40,000,000.

**The Good Times of the Early 80s.**  
During the depression of the '70s much wealth had been accumulated, and people had learned to be economical and more efficient. This especially applied to labor, which had become quite independent after the Civil War, and which needed the lesson taught by the hard times of 1878 to 1877. During these years not only was labor liquidated, but it became more efficient in every way. I refer both to the work of the day laborer and also to that of the officials of all corporations, as these officials attended more closely to business than heretofore. Instead of giving only a few hours a day to business they went to it with pleasure, as was the case with railroad and bank men during the good times following the Civil War, they now spent all day in their offices and gave personal attention to every detail of their work. Expenses were cut, employees were selected with great care, and everything possible was done to make every penny count.

Not only was labor liquidated, but land also declined in value during this period of readjustment. As the demand for land was continually increasing, it was not necessary for the price to decline much before the land, which was unprofitable to work before, now became productive. As railroads construction again commenced, they opened up still more land, resulting in a flood of immigration, and the following figures on "Immigration" for the ten years following 1872 are very significant:

Year	Immigration
1873	459,803
1874	515,379
1875	528,098
1876	569,599
1877	600,000
1878	650,000
1879	700,000
1880	750,000
1881	800,000
1882	850,000

With the Nation's idle savings to use for the development of farm property, and with a host of immigrants, the fertile lands of the West were a great attraction. Therefore, under the impetus of bountiful crops, easy money, and returning confidence, the Nation again enjoyed a period of great prosperity. In fact, during the four years ended June 30, 1881, the balance of trade in favor of our country amounted to an unprecedented average of nearly one-quarter of a billion dollars per annum.

As was usual, new building of all classes was again resumed, and, as heretofore shown, railroad building increased at a very rapid rate. Not only did the new development open up new country, but the building of these railroads themselves greatly added to the business of the country. (From figures which I have compiled it appears that about five million people in this country are directly dependent for their subsistence upon the prosperity of our railroads. These figures do not in any way include concerns which are absolutely dependent on the railroads to move their goods, but simply the employees of the railroads and firms which sell very largely, if not exclusively, to the railroads.) Factories and mills were also busy, and the iron furnaces could hardly produce enough metal to satisfy the orders, and the above table shows the enormous increase in the production of pig iron during these years of prosperity. Therefore, as I turn to the newspapers of the early 80s, I find that great prosperity reigned in every locality. Labor was fully employed, wages were again raised, new lands were developed with great rapidity and the values thereof increased, stock brokers and investment dealers were working overtime, the mills were running day and night, the output of the coal, iron, and copper mines was greater than ever before, while manufacturers and merchants were reaping great profits. Rate wars had ceased among the railroads and earnings were increasing, money was fairly low, large corporations were being consolidated, new stock and bond issues were being sold every day, while dividends were being increased, rights issued, and everything smacked of prosperity.

Of course, there were a few unsatisfactory incidents, such as the Reading reorganization in May, 1880, and the break in the stock market in May and June, 1881, when stocks which had risen on the average of about \$60 a share from 1877 began to drop in the Fall of 1881. Although there were continual fluctuations of about 10 points every four to six months, based on the technical condition of the market, yet there was a continual drop through 1882 and 1883 to the Summer of 1884, when there was an abrupt break of about 30 points.

**The Semi-Panic of 1884.**  
As to the cause of this break in 1884, there are numerous reasons. Some assert that the trouble began with the shooting of President Garfield on July 2,

1881, followed by the poor crops of 1881 and succeeding years. Others state that it was occasioned by the rate wars, which began as soon as business fell off, (due to the poor crops), while others state that the cause was the heavy falling off of our export trade and the consequent importation of gold. At any rate, every effort was made to prevent the decline, and the great men of that day, such as Jay Gould and Mr. Vanderbilt, did everything possible to steady the decline.

Many now state that it is impossible to have lower stock market prices during 1881-1882 because the rich men, who are supposed to have the stocks, are in favor of higher prices. Of course, this all may be true; but in my study of history I fail to find a single decline when the rich men did not first do everything to buy with railroad and bank men during the good times following the Civil War, they now spent all day in their offices and gave personal attention to every detail of their work. Expenses were cut, employees were selected with great care, and everything possible was done to make every penny count.

The people had become greatly alarmed by 1883, and thousands of men realized that they were burdened with stocks and bonds, which could not be profitably sold and were not good as investments; liquidation set in and caused a great burden on the market. Values declined, and stocks fell to the lowest prices known for more than a year. This decline caused greatly unsettled conditions, and although railroad earnings continued good, yet nothing could be done to stay the liquidation. In 1883 new trouble began. The iron and textile trades were depressed and business in general was depressed by a revised "Tariff Law of March 3, 1883." Commodity prices dropped, iron leading the way. Another disturbing feature of that day was the fact that some of the new railroads were exact parallels and competitors of the older systems.

For the real cause, however, of this semi-panic of 1883-84, we must look to causes far deeper than are apparent to the casual observer. The reason why a major depression comes about once in twenty years is said to be due to the fact that each new generation of business men, which is produced every twenty years, can learn only from experience; but why this twenty-year period is universally broken by an intermediate period has not been satisfactorily explained. Nevertheless, the great activity existing from 1878 to 1882 began to cease in 1883, and by the early part of 1884 there was a curtailment in almost every branch of trade. Failures began to increase, several railroads went into receivership, while the most striking feature of all was the drop in the price of securities, and especially of steel rails dropped from \$71 in 1880 to \$35 at the close of 1883.

As was the case during the major panic ten years previous, the strength of the banks was not apparently weakened, and the cash reserves in them improved during 1882 and 1883, while the crop moving requirements of 1883 were made with little of the usual advance in rates. It is true that the strength of the cash reserves may have been partly due to artificial causes produced by the "Rand-Alison act"; but, considering the gold exports, the banks certainly did very well. It was only in the beginning of May, 1884, after enormous exports of gold, that the surplus reserves of the New York banks fell to less than a million dollars. It is stated by some that the large interests produced rates from increases, in order to aid in the marketing of securities and prevent the decline; but whatever may be said, the semi-panic of 1884 was not due to poor banking conditions, which fact should be very significant to those people who think it is always possible to forecast a financial storm by studying the relation of loans to deposits.

Of course, the two great failures of that year were that of the Second National Bank and the firm of Grant & Ward, the senior partner being Gen. U. S. Grant. Perhaps instead of a description in my own words of this brief, but acute, semi-panic, the following, taken from page 582 of the Commercial and Financial Chronicle of May 16, 1884, will be found interesting:

**The Money Market and Financial Situation in 1884.**  
"Financial crises have passed through an extended week marked by many disasters, and full of disturbing features. The failure last week of the Marine Bank and

of Grant & Ward, together with the developments to which this gave rise, created serious distrust, which was deepened when it was announced Saturday afternoon that the Northwestern Car Company, in which Senator Galin, of Minnesota, was the controlling spirit, had been placed in the hands of a receiver. Consequently, an uneasy feeling prevailed on our Stock Exchange at the opening of business on Monday, and the fear was freely expressed that other institutions and firms would be found to be in an equally precarious condition. Prices reflected this fear in a pretty general decline through the day. The uneasiness increased, rather than diminished during Tuesday, and when it appeared on Wednesday morning that a detachment of \$8,000,000 had been detected in the Second National Bank, confidence entirely disappeared. It was apparent then—even before the opening of the Exchange—that only very little more was needed to precipitate a panic, and a wholesale distribution of values. The final shock came in the failure of several brokerage and banking firms and in the suspension of the Metropolitan National Bank. Then the wildest kind of a panic raged, and securities were thrown overboard, regardless of price.

"To add further to the discomfiture of dealers, money became exceedingly stringent and at one time commanded as much as 4 per cent. for twenty-four hours' use. This caused a further sacrifice of stocks, since few could afford to pay the high rate asked. The exorbitant charge was, of course, the direct result of the distrust prevailing, since there was no actual scarcity. There was no improvement until it was understood in the afternoon that the banks had taken action similar to that of 1873, and that no further bank suspensions were therefore likely. At the close of the business on that day the disasters included Metropolitan Bank, Atlantic State Bank (Brooklyn), Hochschild, Burnham & Co., Hatch & Foote, Nelson Robertson & Co., O. M. Bogart & Co., Donnell, Lawson & Simpson, Goffie & Randie, and J. C. Williams.

"The improvement noted at the close on Wednesday made headway on Thursday, when it appeared that the Metropolitan Bank, through the aid of the Clearing House, would be enabled to resume at once, and that the Second National Bank was experiencing no difficulty whatever in meeting all payments, the deficit having been made good in full by the father of the President of the bank. The failure in the morning of A. W. Dimmock & Co., had comparatively little effect upon the market (though it caused a fall of 64 per cent. in Bankers and Merchants' telegraph stock), but the unexpected suspension of Messrs. Flisk & Hatch late in the afternoon was a complete setback, and again threw things into confusion. Friday morning the closing of the Newark Savings Institution was another unfavorable feature, but it was soon seen that this was connected with the suspension of Flisk & Hatch, and a

more hopeful view of the situation prevailed. No further failures occurring, the market improved in tone, and late in the day a pretty substantial recovery took place, which was furthered by the relaxation in the rates for money.

"We have thus briefly reviewed each day's events, because of their great importance and because of the bearing they have had upon the general commercial and financial situation. To state briefly the causes of the disturbance in the market, it may be said that they were strictly due to a complete loss of confidence, not so much in the stability and soundness of various institutions and firms. The difficulty of obtaining ready cash, as a result of disquietude prevailing, also contributed to intensify the troubles that had developed. It is to this latter fact, namely, the desire to realize and obtain cash, that the large decline on Thursday and Friday of nearly 7 per cent. on United States Government bonds is to be attributed. There was no loss of confidence in the value of these, nor was there in good railroad bonds and stocks.

"One result of the phenomenal and temporary rise in the rates for money was to bring a vast amount of foreign capital promptly to the market. Some of it was sent here to buy stocks at their depressed prices, and more to loan on stocks or any other good securities at the high rates of interest. The effect of this was to completely turn the foreign exchanges, which had been running so heavily against us for the last three months. Large amounts of loan bills and bankers' demand bills on London came on to the market, and on Thursday rates for sterling dropped 1 cent on the pound, and on Friday 2 cents more. The supplies of available funds furnished by this means, together with the relief afforded by the banks in the Clearing House Association adopting the same plan of issuing Clearing House certificates for use in the settlement of their clearings as in 1873, already alluded to, had the effect to overcome the pinch for money, and the result was that at the close of business on Friday money on call had fallen to 5 and 6 per cent. per annum.

"In the temporary squeeze for money, resulting from the above causes, there was of course less business done in other classes of loans than on stocks, but the evidence that there was no loss of confidence in values of other kinds of collateral nor in mercantile credit at large was shown by the fact that while money was loaning at 3 and even 4 per cent. per day for use in connection with stock speculations, the rates for mercantile discounts remained nominally unchanged at 4 1/2 and 5 per cent. per annum on first-class indorsed paper for two and four months, and 6 1/2 and 6 per cent. for single-name paper.

**Good Times Quickly Returned in 1885**  
Although some stocks still lay lower in the early part of 1885, the average reached their low point in the summer of 1884; and the year 1885, as a whole, was one

of gradual recovery. It is true that Stock Exchange transactions were very small, failures large, and clearings continued to decline; but the setback in business was comparatively short, and by 1885 everything was going again at full speed. As is usual, after even a semi-panic, money is cheap, which condition eventually prepares a foundation for a general upturn. Although Mr. Vanderbilt did all he could to stay the break of prices during 1882 and 1883, yet he saw that it was unprofitable and decided to let go and sell the market short, so as to win, whatever happened. Moreover, he made the best of his opportunities in 1884 and 1885 by purchasing the securities of several competitive roads, which resulted in the absorption by the New York Central of the West Shore and allied lines.

As is always the case following a semi-panic, labor troubles again crept out, and 1886 stands out in the memory of us all as the year of the fierce strikes in New York, Chicago, and other cities. It was on May 4, 1888, that the bomb-throwing outrage was perpetrated in Chicago, which gave as another illustration of the unimelligent means which the public use to withstand the laws of nature. However, labor was not long out of work, as the wheels of industry again began to turn, and all the country was blessed with splendid crops, which resulted in gold imports and a general revival of building of all kinds. Moreover, although our noble legislators in Washington at this time again attempted to tinker with the tariff, "in order to bring back good times," yet there was enough latent sense and conservatism to prevent this move, and the various bills aiming at a lower tariff and railway-rate regulation were defeated. Under the stimulus of cheap money and favorable legislation, there were nearly 18,000 miles of new railroad constructed in 1887, which, according to my figures, is the greatest number of miles ever constructed in any one year. Eighteen hundred and eight-eight was another year of good business, and although St. Paul passed its dividend retentions continued to increase, and on Jan. 10, 1888, J. P. Morgan came to the front through the enactment of the famous "gentlemen's agreement" between the trunk line officials. In fact, fundamental conditions continued to improve until the Spring of 1880, when the country, was surprised by the Baring failure, in London.

A study of financial "world conditions" for the past 100 years shows the intimate relation between the business conditions in different countries of the world. Unsatisfactory business conditions spread and travel the same as an epidemic or a storm. For instance, a study of the world's condition in the '60s signifies that there had been a general depression in world trade and industry from 1854 to 1858, and a return to prosperity and low rates in 1859. In 1859 there came a great outburst of speculation throughout America and England. An unusual amount of new securities was issued in both of these countries, including vast quantities of railroad bonds. Not only were American railroad securities bought very largely by English people, but this was the time that the Citicorp and other companies came into prominence. The conditions which entered into this country ten years later were begun in England in 1859 and 1860. Breweries and shipbuilding concerns were combined, cotton and woolen mills, restaurants and bakeries were consolidated, and the securities sold to the public. The Citicorp, the Citicorp, and other companies, the Australian Land and Mortgage Companies, and the South African gold mining and diamond ventures were then at their zenith. Not content with the securities, which were being sold in this country and the hungry Englishmen turned to the Argentine, and there organized land companies, railroads, and other speculative ventures. Moreover, the Argentine public and her cities issued enormous public loans at high rates of interest, which were also purchased by the Englishmen. About \$300,000,000 in loans were negotiated by Argentina from 1856 to 1858, and in 1859 the republic is said to have obtained over \$5,000,000,000 abroad. This condition is best illustrated by Prof. W. Jett Lauck in his admirable book "The Causes of the Panic of 1883." Says he: "European investors, however, did not limit their activities to the purchase of securities. The Argentine Government was financed by European promoters and financiers for concessions to construct railroads, docks, waterways, municipal improvements, and a description of public enterprise. Many of these projects were undoubtedly of a legitimate character and necessary to the development of the country, but the movement in this direction soon exceeded all reasonable bounds. Railroads were built which could not pay operating expenses for years to come. Other industrial undertakings were entered into, not only with the aid of the existing inflation in values and the prospect of the country's growth in wealth, and population in the future. Public works of all kinds were also constructed without taking into account the real wealth and taxpaying power of the community. The fever of speculation, in short, arising from the inflation of land values, soon developed into an actual rush for wealth, and with the growth of confidence in Argentine resources European capital was literally poured into the country."

**The Crisis of 1890.**  
Not only did England buy these speculative securities of Argentina and other countries, but France and Germany did likewise. It was during this period that the famous copper syndicate was organized, which resulted in falling the Société des Métaux and the Comptoir d'Escompte. German capital especially was interested in the Argentine, and the conditions existing abroad in 1890 are further described by Prof. Lauck as follows: "The financial situation in Germany and Great Britain during the early months of 1890 was, therefore, exceedingly precarious, owing to the reckless speculation which had prevailed in both of these countries, and especially in Great Britain during the previous four years. The action of the Bank of England, however, at the beginning of the year in raising the rate of discount, as already seen, had exercised a restrictive influence upon British financial excesses. A period of comparative ease and quiet succeeded, which lasted only about the middle of the year. At that time the financial troubles in Argentina reached an acute stage and through their influence on Great Britain, brought financial affairs in that country to a critical stage. The disposition of the gold reserve, which had been deposited with the Government by the Argentine banks as a guarantee of their note issues, had been followed, as already pointed out, by a lack of confidence in Argentine paper currency, and a consequent rise in the premium on gold, which ranged from 200 to 250 per cent. during the early part of the year 1890. Under these conditions" great difficulty was experienced in carrying out the Argentine Government. The

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interest charges on cedulas, together with that on national, provincial, and railroad bonds held abroad, required the annual remittance to Europe of about £7,500,000 in gold. Moreover, the annual indebtedness of Argentina abroad was further increased by the fact that her merchandise imports exceeded exports. No gold was produced in the country, and, under the system of depreciated paper currency, none was received by the Government in the payment of taxes. Consequently, it soon became evident to public officials in Argentina that the only way to avoid default of payment on Government obligations was to negotiate fresh loans in Europe for the purpose of paying interest charges on previous issues. This recourse, however, owing to the growing suspicion of European investors, became more and more difficult. An acute crisis was therefore soon reached in Argentine finance. Through its influence a political revolution was inaugurated, which, in July, 1890, swept the existing administration out of power.

"This change of Government, as might be expected, weakened what little confidence there was left in Great Britain as to the stability of Argentine finance. British investors refused to place any more funds in Argentina, and the price of Argentine securities steadily declined. Consequently, the English financial houses which had been floating Argentine loans found themselves in a position of great difficulty. Large masses of securities which they had underwritten, and which they had hoped to sell to the public at a profit, remained on their hands. On account of the fall in value of these securities it was impossible to sell them except at a ruinous loss. For the same reason it was impossible to use them as a collateral for loans. The capital invested was, therefore, locked up, and in order to secure funds to carry on their business, British financial houses were forced to sell consols, American railroad stocks and bonds, and other good securities. These transactions quickly attracted attention, and rumors soon became prevalent as to the embarrassment of different firms in London. To make matters worse, about this time there was a collapse in the South African gold-mining companies, followed by the failure of several South African banks. This disaster caused a further drop in stock values. At the same time the financial houses which had been active in promoting mining companies found themselves in possession of a large

mass of undigested securities, and in order to protect themselves were compelled to add to the existing alarm by throwing good securities upon the market. Under these conditions, the rumors as to the solvency of various financial houses which were known to be interested in Argentina and South Africa became persistent. The distrust thus generated gradually until a climax was reached on Nov. 15, 1890, when it was announced that the great firm of Earing Brothers & Co. had been compelled to close its doors."

### How a Panic Travels.

It will be seen, therefore, that the great crash in Argentina in 1890 followed the steamship routes to England in 1890-91, causing a decline in all classes of securities, wrecking the best banking houses of the nation, and would have caused an irreparable loss to all had it not been for the very efficient methods adopted by the great Bank of England. If the main arteries of trade had been from Argentina to the United States instead of to Great Britain, there is no doubt but we would have felt more immediately and severely the effects of this panic in Argentina than we did. As, however, the main arteries of trade from Argentina went to England the panic followed these steamship lines, and the conditions existing in Argentina in 1890-90 were repeated in England in 1890-91. From England the conditions followed the lines of trade to France and Germany, straying panic along the route throughout 1891 and 1892, then turned westward from Europe, across the Atlantic Ocean to the United States, striking us in 1893.

Nevertheless, although the public is acquainted only with the "Panic of 1893," yet for a few months during 1890 conditions were very bad in this country. Although the final effects slowly followed the circuitous roads of trade, yet with our cables, the influence was felt almost immediately. Thus, as had been the case with all previous great business epochs, the so-called "Panic of 1893" consisted of two distinct blows, a hard, severe blow in 1890, and a second and final blow in 1893. So far as the stock market is concerned, the chart herewith reproduced shows the average of stocks as a whole to have gone lower in 1890 than in 1893, which was also the case with the bond list shown on the chart. This bond list, however, consists mostly of corporation bonds. A list of municipal bonds shows a lower average in 1893, viz.:

TABLE SHOWING CHANGES IN THE YIELD OF BONDS, CAUSED BY THE PANICS OF 1890 AND 1893.

Character of bonds.	Sept., Nov., Aug., Nov., 1890, 1891, 1892, 1893.			
	1890.	1891.	1892.	1893.
New York & New England municipal bonds.	3.50	3.87½	4.00	3.75
New York high-grade railroad bonds.	3.75	4.00	4.00	3.75
Municipal bonds of the Middle West.	3.75	4.25	4.75	4.50

Nevertheless, in the United States business quickly recuperated from the panic of 1890 and stocks also recovered a good part of their loss, all of which is shown very clearly on the chart herewith reproduced. The enactment of the McKinley protective tariff in 1890 greatly aided manufacturers and gave confidence to shippers and merchants. Moreover, our country was becoming very wealthy, the accumulation being in a few hands. This resulted in money being spent with great recklessness accompanied by the usual forgetfulness of the God from Whom all our blessings come. In fact, social righteousness was greatly on the wane, and the whole Nation had again gone mad over money and pleasure. From 1890 to 1893 our religious and charitable organizations showed the smallest growth for any period of years in our history; while social and commercial corruption greatly increased. The election of 1892 was of a character which would make every good American blush, and the conditions in New York and other great cities are well known to all.

### The Silver Purchase Act.

Outside of the social and commercial unrighteousness and the abnormal railroad building, the most favorable symptom was the silver legislation and the peculiar financial situation of the United States Treasury during 1891, 1892, and 1893. In 1891 we had a splendid grain crop and, as Europe had a short crop, this resulted in very heavy exports from the United States. These splendid crops, with the consequent gold imports, were largely the causes of the intermediate rebound in 1891. Instead, however, of allowing conditions to adjust themselves naturally, the people attempted to bring still greater prosperity by indulging in more unintelligent legislation. Not content with making abnormally large appropriations, the Fifty-first Congress began to increase the money in circulation, inflate the currency, and issue Treasury notes. As these new legal tender notes were accepted by the Treasury for duties the Government received more and more of these notes and less and less of gold

as formerly. Although during 1890 about 90 per cent. of the customs revenue at New York was paid in actual gold, yet during 1891 only 12 per cent. of the receipts were in gold, in 1892 only 8 per cent., and in 1893 gold receipts practically ceased. This, therefore, shows briefly how the issuance of these legal tender notes, which had little intrinsic value as a world medium of exchange, resulted in depleting the United States Treasury of gold. After December, 1892, gold payments to the New York Clearing House were practically abandoned, and gold was very seldom presented to the customs authorities, although formerly only gold or its equivalent was accepted.

It is human nature, as anything becomes scarce and tends to leave us, to want it more than ever and do everything we can to hold on to it. Thus, gold was then hoarded both by the Government and by the banks. As soon as actual conditions existing in the United States Treasury, especially its lack of gold, began to be realized by nations abroad, foreign investors immediately began frightened, and, instead of being willing to take our notes as heretofore, they insisted on gold payments. This took still more gold from the country, and especially from the United States Treasury, and British and other foreign investors hastened to sell their holdings of American securities. Although the fear of becoming short of gold was the apparent reason for this foreign selling, yet the real reason was probably that the Englishmen and Germans were obliged to raise money to protect their own home properties, and it was only natural that they should sell American securities which had as yet not declined much in value. When one country sells another country's securities and so on around the circle, these panics travel and cause the prices of commodities and securities to drop in these countries in succession.

### Panic of 1893.

Whether it was the condition of the United States Treasury, or our great railroad expansion and the securities issued in connection therewith, or the forced liquidation of American securities and commodities by the Englishmen and Germans, I do not know; but whatever the cause, certainly the final crash came in 1893. First, there was a collapse in the New York stock market, shown graphically on the above chart. This was followed by runs on various banks throughout the interior of the country. To protect their balances, the country

banks drew on the Eastern and other reserve cities. Money rates increased to abnormally high figures, gold began to be sold at a high premium, all of which resulted in mercantile and industrial failures, bank suspensions, and the like.

Congress endeavored to rectify the situation by the repeal of the Silver Purchase act, the Sherman law, and authorized the sale of bonds to replenish the gold in the Treasury. Mr. Cleveland with a Democratic House had been elected President in November, 1892, and it was expected that the Democrats would again tinker with the tariff as soon as they came into power in 1893, and therefore it was impossible to hold the confidence of the people. Early in 1893 the Reading Railroad Company became bankrupt so that the Reading stock fell to \$22 a share within a week, and interest rates increased to over 50 per cent. The acuteness of the mercantile situation was felt on May 20, when the National Cordage Company failed. The next day S. V. White, one of the most prominent brokers of that time, assigned. Although the break in 1890 was apparently a surprise to the large interests, as they had not disposed of their securities, yet the second blow in 1893 was already foreseen by them. It is true that from 1890 to 1893 these big interests were continually giving optimistic interviews and endeavoring to lead every one to believe that the situation was fully cleared in 1890, and that no further readjustment was needed. However, it is very evident that during these three years they were continually liquidating as rapidly as possible, and probably many of them were short of the market when the final break came in the Spring of 1893.

### Conclusion.

As this series of articles is not designed to describe our great panics, but rather the intermediate periods between the panics, I will not enter any further into the details of the great panic of 1893 and the disaster, failures and trouble that it caused, but will close with just a word in review, viz.:

The "Panic of 1837" was caused by speculation in land and over-development of various projects connected therewith; the "Panic of 1857" was distinctly a banking panic caused by the rapid growth and illegitimate operation of hundreds and thousands of country banks which sprang up throughout the nation like mushrooms; the "Panic of 1873" was distinctly a railroad and industrial panic

caused by the nation's rapid and abnormal growth. As the promoter suffered in 1837 and the country banker in 1857, so the merchant and manufacturer suffered in 1873.

Although the above description of how a panic started in Argentina in 1890, traveled across to England and reached this country in 1893 is a splendid illustration of the principle involved, yet it is not fair to say that our panic of 1893 was caused by the Argentina panic of 1890-90. If you or I become afflicted with the grippe, we truly "catch it," so to speak, from some one else; but the reason we "catch it" is not because some one else has it (as we are always in the presence of such diseases), but rather because our own physical condition is not sufficiently strong to ward off the infection. It was the same with our country in the early 90's. Our great railroad expansion had caused our country to be saturated with undigested securities; our nation had become extravagant and forgotten the fundamental laws of economics and conservatism; and our Western farmers had mortgaged their property on a basis of continued abundance of crops, having no reserve to fall back upon, when there came simultaneously poor crops, political agitation and a loss of gold from the United States Treasury, which was like draining blood from one's body.

In fact, it was this last cause which directly weakened our position so that the panic was inevitable. When one considers the widespread fear that existed both in this country and abroad that we would not be able to maintain the gold standard, is it to be wondered that our house fell? Or to quote from a well known authority: "1893 was essentially a monetary crisis, and its typical feature consisted in the numerous failures of banks and financial institutions. Moreover, the precipitation of and the recovery from the crisis furnishes additional evidence to bear out the foregoing claim. The beginning of the crisis, as already seen, was marked by the decline of the Treasury gold reserve, on April 22, below the \$100,000,000 limit; the ending of the resultant industrial and financial chaos dated from the repeal, on Aug. 28, of the Silver law of 1890. The apprehension in 1893 as to the fixity of the gold standard of payments arose indirectly out of the silver agitation and legislation during the period 1878-90, and was directly traceable to the operation of the Sherman silver purchase law of 1890. For seventeen years, 1873-1890, the gold

standard of payments was constantly threatened, and the crisis of 1893 was practically the culmination of this long period of uncertainty."

Of course there are many other features which might be mentioned, including a discussion of the issuance of "Clearing House Certificates" and other factors; but space will not permit. I must, however, quote the following few lines from a report which Prof. O. M. W. Sprague of Harvard University has made to the National Monetary Commission as a warning to merchants, manufacturers, and investors that low money rates are not sufficient to prevent a financial disaster: "During 1892 the low rates for loans were a clear indication that the banks would have been glad to lend more than the demand of borrowers made possible. The situation was in marked contrast to the months preceding other crises when every available credit resource at the money centres has been stretched to the extreme limits of safety and beyond. For these reasons the opinion may be ventured that the silver issues were not an important factor in determining either the course of trade or the operations of the banks during the period which preceded the crisis of 1893."

This shows that the only way to be forewarned of these great crises in mercantile, monetary, and investment affairs is to study general fundamental conditions along the lines indicated in my book entitled "Business Barometers." Although some one factor has been pre-eminently the cause of each of our Nation's great panics, yet these causes have greatly differed with different panics, and the only way that a merchant or an investor may be sure of being forewarned is always to keep in touch with all of these subjects; or, what is simpler, to watch from week to week the "Composite Plot of Business Conditions" which is based on the figures of all these subjects, combined and weighted in accordance with what past history has taught. Merchants and investors who are content with studying surface conditions and "let well enough alone" are most certain some time to fall as did the tens of thousands of worthy men from 1893 to 1897. Those, however, who will study bank clearings, railroad earnings, foreign trade, gold movements, crop conditions, and such other fundamental figures as my office provides, will be fully prepared for the next period of readjustment as the "big men" were prepared for the panic of 1893.