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**HOW MONEY IS MADE IN  
SECURITY INVESTMENTS**

**OR**

**A FORTUNE AT FIFTY-FIVE**

**BY**

**HENRY HALL**

*SECOND EDITION*



**52 BROADWAY  
NEW YORK  
1907**

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HENRY H.



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*Reclams 2-18-28 M. V. P.*



## PREFATORY EXPLANATION

A NUMBER of text books have been written to explain the character of the securities, which are sold through the banking and brokerage houses of the United States. They treat of stocks, bonds, notes and mortgages and describe the peculiarities of each. Other books have been published to define the meaning of the technical terms in vogue in the financial world. They all serve a useful purpose.

It seems to the writer, however, that there is imperative need of another work, which shall go beyond elementary facts, and, in the matter of advice, shall do more than dwell upon the simple truism that an investor, before all other things, should pay attention to the safety of his capital and the regularity of his income. An investor needs to know how he can actually accomplish those objects, and farther, not only how he can avoid the loss of part or all of his money, but also how to make money in securities. This book is devoted to the broad principle, that, unless there is a fair assurance that money can be made on stocks and bonds, it is almost certain that money will be lost on them or so locked up as not to be available for other uses for a period of years. If securities are going no higher, if the times do not promise greater profits and larger dividends, then all classes of securities are going lower, at a date not far distant.

A vast amount of money is either badly employed or wasted, every year, by investors, and great opportunities

ne should sell everything  
harvest the profit he has on  
selling in times of bullish e  
average investor is usually  
Conversely, an investor only  
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the objects of this book.

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that they will conserve the in  
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## PREFATORY EXPLANATION

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generality, and he can proceed with the purchase and sale of securities, with a confidence which is denied to men less well informed. The subject of security investments, and how to make money in them, is here discussed to meet the requirements of many thousand Americans, who have moderate amounts of money, say from \$500 to \$5,000, which they desire to add to their permanent capital, and from which they wish to derive as large a revenue as is consistent with safety, and from the investment of which they can also gain an actual increment to their principal.

This work will not encourage the belief that a man can make himself rapidly rich by trading in Wall Street with a few thousand dollars of capital. The achievement is possible to men who have been trained to the business, but it is foreign to the purpose in view. The object will be to show that security investments can be handled in such a shrewd and conservative manner, that the principal will be safe and the income sure, and that when this is accomplished, a desirable increment can be added to principal in a perfectly legitimate way—a policy which will ensure a fortune possibly in a series of years and certainly in a life-time.



**HOW MONEY IS MADE**





# HOW MONEY IS MADE

## I

### A NATION OF INVESTORS

OLD TIMES IN AMERICA, COMPARED WITH THE PRESENT.— AMERICAN SECURITIES ONCE OWNED MAINLY ABROAD.— THE CHANGE SINCE 1825

PEOPLE were strong, healthy and happy in the “good old times” of the forefathers of the republic, but they were not rich. The skies were as blue as now, the grass as green, the streams were full of fish and the forests of game, the soil was fertile, and it was not difficult to make a living; but scarcely any one owned securities and the commonalty knew little about them.

Several millions of people occupied the thirteen colonies. They were courageous, industrious and thrifty. But in the simple occupations of the pioneer settlers of a new continent, no great amount of surplus wealth could be accumulated. Lands and plantations, stage coaches, toll roads, sailing vessels, petty manufactures for local sale, retail and auction stores and inns all existed and were the forerunners of lines of business, in which fortunes have since been made. At the time, they merely afforded a subsistence to the energetic men, who devoted their lives to them. Millionaires were almost unknown, while men worth several hundred thousand were extremely rare. General Washington was probably the only man on this continent in his day, who could have been rated as a millionaire.

Securities were not unknown of course; but there were only a few joint stock companies and almost no corporations; and from the very nature of the case, stocks and bonds had little more than an academic interest to persons who had no money with which to buy them. Owners of securities were found only among a limited number of merchants and bankers in the larger cities and the proprietors of landed estates, North and South.

Stocks and bonds came into vogue, gradually, after the War for Independence, as wealth increased and the trade and natural resources of the country were developed. Before many years had passed, the necessity had arisen for enterprises, which could be set on foot only through the aid of the united funds of many different persons or the resources of the State. Bonds were issued by the public authorities for the payment of debts to the soldiers and others and for the construction of roads. New ventures outside of the province of Government were carried out by organizing joint stock companies and corporations; and as foreign trade had brought a great deal of money into the country, it was possible to secure the capital for the early modest enterprises mainly through leading men of the different localities, who took the stocks and bonds of new companies, largely from motives of public spirit and not because they were seeking desirable forms of investment for surplus funds. The first great stock company came into being in 1791, when Congress chartered the original United States Bank. Local banks were formed in the leading cities, followed later by fire and marine insurance companies. During the twenty years next after Independence, Americans had become familiar with the idea of devoting a part of their surplus capita' to the purchase of securities.

For many years, however, it was practically impossible to float large issues of securities in the United States. The projectors of every important enterprise looked to Europe for a considerable part of the funds required. One of the interesting items of news in "Niles's Register" and other public prints, a century ago, was the quotations of American bank shares and State bonds in London, printed here about a month late as a rule.

An illustration of the inability of rich Americans, a century ago, to absorb a large issue of even the most gilt edged security is afforded by the experience of the first United States Bank, an institution of which the country was extremely proud. Measured by the times, the bank was a gigantic concern. It had a capital of \$10,000,000, of which the Government took \$2,000,000, the public \$8,000,000. In modern times, it is on record that one man has supplied \$8,000,000 for a single enterprise. In 1791, the sum was too large for the whole of the infant republic. While it is true, as reported by President Washington, that the entire capital stock of the Bank was subscribed for in one day, the fact remains that those who thus became partners in the Bank took the stock in most cases as a speculation, not as an investment; and, as was expected, the bulk of it speedily found its way abroad. In 1809, after the Government had sold its interest in the Bank, an official report stated the rather surprising fact that only 7,000 shares (of \$400 each) were owned by Americans. The remaining 18,000 shares were held in Europe, mostly in London.

How little the ownership of securities interested our people in the early days is farther shown by the entire absence of special facilities for dealing in them. Bonds and stocks were bought and sold principally at the stores

of leading merchants and auctioneers. Not until 1792, a year after the organization of the United States Bank, were steps taken which tended toward the creation of a specific market-place for securities. In that year, a start was made in New York, by an agreement between a few jobbers of stocks and bonds as to rates of commission. This was the germ of the New York Stock Exchange. In later years, dealers in securities in other cities started stock exchanges of their own.

After the dawn of railroad construction in 1826, investment in stocks and bonds began to play a distinct part in financial affairs. Wealth had continued to accumulate; and many persons were found in the cities, who had managed to save, through frugality and their talents as business men, dollar by dollar, sums of money not required in the prosecution of private business. This class of persons became considerable buyers of the securities of the pioneer railroad lines and public utility corporations, which sprang up in the '30s and '40s. Some of these investments were profitable, with the consequence that men of means turned more and more in the direction of corporate securities as a proper and safe employment of surplus capital. Each decade of progress added to the volume of stocks and bonds afloat and the number of buyers of them. The process was a gradual one, however, and more than one generation of active business men had crossed the stage of affairs and disappeared, before there was any striking increase in the transactions in securities or the roll of stockholders in corporations.

From Edmund C. Stedman's "History of the New York Stock Exchange" it appears that in 1827, trading in New York was confined to forty-two descriptions of security issues, as follows:

Twelve bank stocks.

Eight public bonds.

Nineteen fire and marine insurance companies.

Delaware & Hudson Canal stock.

New York Gas Light stock.

Merchants' Exchange stock.

In 1837, a day's trading sometimes amounted only to about 4,000 shares. Even as late as the outbreak of the Civil War, in 1861, in spite of the enormous advance in wealth and enterprise, only twenty-two stocks were dealt in on the New York Stock Exchange, in more than fractional lots, sixteen of them being railroad shares.

How remarkable is the change which has since taken place will appear from the fact, that in 1906, sales of stocks on that Exchange amounted to 289,425,000 shares, having a par value of \$28,942,500,000, while bonds were sold in 1905 to the value of over \$1,000,000,000. More than 250 descriptions of stocks were dealt in, and more than four hundred and fifty varieties of bonds.

In the eighty years or so since the whistle of a locomotive was first heard in the States, a change has been wrought in the wealth of the people, the volume and value of securities afloat and the number of investors, which is one of the marvels of the world's history. It is good to be an American and to have played some part in the betterment of conditions, which has brought about this transformation.

No figures are at hand, at all important, as to the actual wealth of the population in Washington's day. It is known, however, that by 1850, wealth had grown to about \$7,000,000,000 and has since expanded to \$95,000,000,000. In 1907, the country is rich and comfort is general, at least among the native born. Americans earn more,

... is concerned, one needs a savings bank to gain a clue to the —8,635 depositors in 1820, ... \$1,139,000, and more than 7,400 the average of accounts is three

In every rank of life, one notices, and the number of them is the natural product of the thrift of the people. We give equal opportunities to all, and we reap the bountiful harvests from our rich soil in every branch of trade and manufacturing. In coal, oil and metals, the division of labor affords equal opportunities for profitable speculation.

Here, as in older countries, the freedom of thought and action has led from primitive conditions to wealth. Thousands of workmen have passed from a life of lack of bread to eat, and have saved their money and bought a few bonds or shares of stock. The blacksmith and smart carpenter, the farmer and the iron mill is thus a capitalist on a large scale. The 40,000 employés of the United States alone are owners of stock in the land, operatives are taking shares

circumstance is the fact that in the West hundreds of small banks have been organized in the last ten years, an appreciable part of whose stock has been subscribed for by farmers.

Among the millions who are under salary as managers, teachers, journalists, officials and clerks, or who conduct small retail stores, there is now an army of frugal people who seek a larger return on their modest accumulations than a savings bank affords and who are receiving from 5 to 7 per cent. from stocks and bonds which they have bought.

A curious instance is known, in which the chambermaids and serving men of a Southern city became stockholders in a local shipyard, started for repair of the swarm of fishing and truck boats owned on Chesapeake Bay.

In the cities, a vast number of people, men and women, are owners of from five to twenty shares of bank, gas, or street railroad stock.

There is little need to multiply instances, since it is within the knowledge of every one, that investors are now to be found on every side among the ranks of people of moderate means, as well as among the men of wealth. Without dwelling further on the point, suffice it to say that Americans have fully learned the desirability of investment in securities and the United States has become a nation of investors.

There are no statistics as to the exact or even approximate number of investors in America. It is doubtful if any useful object would be served, if the number could be known. As long as the assessor and tax collector flourish in the land, insurmountable difficulties will stand in the way of an accurate census of security owners, although

the facts would be interesting enough. A few of the foremost corporations, like the Pennsylvania Railroad and the United States Steel concern, have taken pride in publishing the number of their stockholders; but they are exceptions, and a policy of secrecy prevails among the majority of other stock companies. A few years ago, one of the New York mercantile agencies made a strong effort to compile the total number of stockholders in leading railroads but was obliged to abandon a task made impossible by official indifference.



## II

### HOW AN INVESTOR MAKES MONEY

GREAT RICHES POSSIBLE IN STOCKS.— MOST FORTUNES IN AMERICA ENHANCED BY SECURITY INVESTMENTS.— HOW THE THING IS DONE

**T**O the young man and the uninitiated, one of the most mysterious of phenomena in the business world is the accumulation of magnificent fortunes by men who began life without a dollar. With rare and conspicuous exceptions, the men of to-day who live in splendid houses and own estates in the country, and who have steam yachts, motor cars, art collections and practically unlimited means, have come up from poverty. How can such fortunes be made in one life-time? Machiavelli took the ground, that no man could ever rise to great wealth or power, without the use of either force or fraud. This might have been true in his times and country. It may be true, in these times and this country, of more than one man who has obtained opulence by trampling others under foot or by taking unfair advantage of his countrymen. But the assertion is not true of every rich man; it is not even true of many; and the life story of such men as Marshall Field, J. P. Morgan, George Peabody, John W. Mackay and thousands of other well-known Americans is a sufficient refutation of Machiavelli's heartless and immoral doctrine.

The answer is, certainly; and Andrew Carnegie are authors they ought to know.

While there is more than one interesting fact, that most of them have been chiefly due to, it may also be stated that the man who has saved a thousand among the capitalists of the future some regular occupation for his will spend a reasonable amount of study of finance, the tariff and sound and sane methods in his cultivate his own judgment and Such a man ought readily to be v age. Does this seem a chimerical go on.

Before passing on, however, let intention to encourage active spe purpose is a different one. So f however, nothing that any man c and to

## HOW AN INVESTOR MAKES MONEY 13

—in lands, cattle, mines, mulberry trees, tulips, potatoes, iron, gold, grain, beans and whatever else has been in great demand at different periods in the world's history. No power on earth has ever been able to prevent this. The instinct to make money by buying something or creating something, which stands a chance of being sold at an advance, is deeply implanted in the human breast; and the necessity of making money by some such process is so imperative to the majority of men, and there are so few "sure things" in life, that it would seem to be as useless to try and stop the taking of risks, as to seek to level a brick wall by throwing dandelions against it.

With reference to taking risks in stocks, the great objection is that many persons incur them without the slightest knowledge of Wall Street history or methods. Their Wall Street ventures are unequivocal gambles. A deep student, be he a plodder or a man of genius, will succeed, where others fail. With legitimate business as a means of livelihood, with close study of underlying factors, infinite patience and conservative methods, an investment in stocks should be profitable in nine cases out of ten. An investor would then be following the line of action, by which the captains of finance have been able to amass riches in Wall Street.

Long ago, it was observed that the market prices of all securities were subject to serious variations. In the early part of the last century, bank stocks sometimes sold for 50 per cent premium. Bonds often sold below par. The stocks of various of the pioneer railroads underwent fluctuations of great violence. Some of the first railroad lines, especially in the West, and more particularly those which were fostered by Government

land grants, were built while population was scanty and before the routes traversed could supply business enough to ensure dividends or even the expense of operation. Each railroad proved a powerful stimulus to local trade and to the value of lands; but the companies themselves often languished for years and many of them became insolvent for lack of money. The decline in value of the stocks of some of those roads will never be forgotten by men yet living. On the other hand, the bankers who financed, the men who managed, and the larger stockholders who clung to those corporations, during their years of trial and until settlement had wrought its miracles of development, discovered one secret of great wealth in the rise in value of their stocks when dividends had become assured.

Even among stocks on which dividends had always been paid, extreme fluctuations in price were witnessed from year to year, and season to season, in response to trade conditions, the abundance of money and the public demand for securities.

It certainly took no observing man long to grasp the fact, that the varying price of securities supplied an opportunity for profits much beyond the income to be derived from them as investments. Cool and far sighted men have materially added to, and made, fortunes in stocks, carefully bought in years of panic and depression and sold in later periods of prosperity.

The primary object of every man who buys a share of stock or a bond is, and should be, to invest his surplus money safely and derive a suitable income therefrom. But it is a maxim of Wall Street, that "a good investment is a good speculation." It is so indeed. If proper!

## HOW AN INVESTOR MAKES MONEY 15

bought, stocks will in time show an increment on the purchase price. A few examples of fortunes, which have been made in stock investments, will not be out of place. They are taken from the history of the last generation.

Commodore Vanderbilt began life as the owner of a canoe, which he sailed as a ferry boat from New York to Staten Island. He borrowed money to go into a steam ferry line and extended his operations to steamboats in general. Late in life, he went into railroads and made the name of his family famous by buying good stocks when they were cheap and selling some of them afterward at an advance, often at almost fabulous prices.

Moses Taylor, who had grown up in the mercantile business in New York, surprised even some of his business associates by dying worth \$40,000,000, made by backing Delaware, Lackawanna & Western at a critical period in its affairs and after a thorough investigation.

The Astors owe their immense holdings by no means entirely to real estate. They have always been careful and shrewd buyers of stocks in violent declines. They are often in the stock market.

Crocker, Huntington, Stanford and others of that group of remarkable men were merchants in a small way in the neighborhood of the California gold mines. Their fortunes were due in part to railroad contracts but mainly to the rise in value of the stocks owned by them.

Jay Gould, one of the most daring and intellectual men Wall Street has ever known, left more than \$70,000,000 to his family, the bulk of which arose from the purchase of stocks in times of depression and their appreciation in price after he had built up the properties they represented.

George Peabody derived his great wealth from stocks, bought and sold wisely.

Thousands of other men, some of them not known outside of their immediate circles, until the Probate Court or their gifts to public objects revealed the extent of their possessions, acquired entire financial ease through stocks, bought when they were low and sold advantageously when they were high.

What took place in that respect during the last generation is being also done, to-day, by a throng of men, on every side, who have risen from modest beginnings in trade, mines, manufactures, etc., and are now among the captains of finance and industry in these States.

Among the men who have added to their wealth by stock investments, there are, of course, a few persons of exceptional qualities, who have themselves called into play the forces, which made stocks in general or those in which they were particularly interested, high or low. All the others, and that means all except one out of every thousand, have simply taken advantage of the situation as they found it. They bought stocks, when they could do so, safely and cheaply; and they sold, when the good times or the manipulation of prices by insiders had forced stocks to high figures. It is this policy only which can be followed by the small investor. He can do little or nothing whatever to affect the price of stocks, one way or the other; but he can buy them, when they are extremely low, all things considered, and he can sell them in boom times, at or near the top of a long rise.

Now, what results can be produced in a series of years by the ordinary investor?

Suppose that a young man, starting in 1870 with a thousand dollars which he had earned and saved, had put ?

## HOW AN INVESTOR MAKES MONEY 17

into New York Central stock. That was an approved and good stock, with a great future, and a dividend payer. Ten shares could have been bought for \$900. New York Central has always been an investment stock, very steady in price, and very safe. If the investor, starting with his ten shares, had sold the stock within four or five points of the top of every considerable rise, and had reinvested all the money in New York Central somewhere near the bottom of every marked decline, from 1870 to 1905, he would have been worth at middle age the sum of at least \$150,000; and this would have taken care of him, all the rest of his life. No panic could have touched him, because his shares would have been fully paid for. He would not have been obliged to go into the market and give an order (to buy or sell) more than once or twice a year, as a rule. He would have learned by experience, when New York Central stock was too high to keep, and conversely when it was so low that he ought to buy it. He would have had to be a diligent student of financial conditions in general and of the earnings and prospects of New York Central in particular. He would have received a number of dividends while the stock was in his name between times; and at the moments of reinvestment, he would always have had a little surplus cash left over after making his purchases.

If, in 1870, he had put his money into Illinois Central, another sedate investment stock, with a great record as a dividend payer, he would have had to pay about \$1,300 for ten shares of it. If he had sold, and bought again, as above outlined, dealing in Illinois Central alone, his holdings would have grown to about 900 shares by 1905, worth about \$170,000, all the outgrowth of the original \$1,300.

Ten shares of Delaware, Lackawanna & Western,

bought in 1870, for \$1,020, would have grown to 1,000 shares in 1905, worth about half a million.

There were fewer stocks to choose from in 1870, than now—only about seventy actively traded in at the New York Stock Exchange, then, compared with over 250 now. It is therefore quite possible, that a neophyte in investment in 1870 would have put his first thousand dollars into some stock, which afterward ceased to pay a dividend for a time, or into a stock which did not pay a dividend even then, but which like Union Pacific had a great and certain future.

Suppose that he had gone into St. Paul, a stock with a checkered career, but now a gilt edged investment. He could have bought fifteen shares in 1870 for \$900, paying about \$60 a share. In 1877, St. Paul was worth as low as \$11 a share. The price rebounded from that low figure and in 1881 St. Paul sold as high as \$129 $\frac{1}{4}$ . In 1888, dividends were suspended for a time. Hundreds of men have followed the fortunes of St. Paul through good and evil days until the present time. They saw the stock rise to \$198 $\frac{3}{4}$  in 1902. If an investor in fifteen shares of St. Paul (bought in 1870 for \$900) had sold anywhere near the top of the next considerable rise, and had reinvested all the money in the same stock anywhere near the bottom of the next heavy decline, and had pursued this policy consistently, he would have made about \$2,000,000 by 1905.

If our investor had chosen Union Pacific for his studies and investment, from 1870 to the present day, he could have started with fifty shares costing about \$1,000 and sold out his interests in 1905 for something like \$3,000,000, and this, too, without having had to pay the assessment when the company was reorganized in 1897.



## HOW AN INVESTOR MAKES MONEY 19

Central of New Jersey would have yielded about \$6,000,000 in thirty-five years from an original investment of \$950.

Does it not begin to be clear how magnificent fortunes have been made in stocks, by many actual investors?

Now, it must be admitted, at once, that no private investor can ever be in such close accord with the ruling spirits in the stock market, or have such an intimate acquaintance with underlying conditions, as to be able to know when the exact top of a boom has been reached, or when prices are actually scraping on the bottom of a long decline. An outsider can never sell at the highest or buy at the lowest, except by the merest accident; and he will probably go in, or out, several dollars a share away from those extremes. He will often experience the chagrin of seeing his favorite stock go higher after he has sold and lower after he has bought. Allowance has been made for that in the foregoing calculations.

No man can expect to do better than the real insiders. It is perfectly understood that they begin to sell, a little at a time, on the way up, as the top is approached, and they begin to buy "on a scale down" as the market is nearing its bottom. The real point for an investor is to be able to tell, approximately, when the major swings of the market, extending over a series of months or years, are coming near their turning points. That is near enough for him.

But this is the very gist of the whole matter. How shall a man know when to go in and when to go out of stocks? In order to accomplish anything like the results referred to above, a man must know this and know it for himself.

An investor has a thousand dollars to invest. He reads

the daily newspaper for a week and he notes that stocks go up to-day. Tomorrow, they mysteriously go down, for no reason at all that he can see. The end-of-the-week financial columns discuss the general situation; and the writers are blue or cheerful, as the case may be, and what they have to say is most interesting and informing. A very few of them are bold enough to say now and then, in their own phraseology, "Investors, the time has come; buy stocks as quickly as you can." Has any one ever known a good newspaper to advise everybody to sell their stocks and retire from the market? The newspapers cannot do this. They can and do call attention to the fact, when distribution is in progress. But this is as far as they have any right to go, considering what the province of a newspaper is. The reader has the facts and must judge for himself.

An effort will be made in following chapters to supply an investor with the means of forming his own judgment in this matter.

An investor may follow one of two courses. He may put all his eggs into one basket, and watch the basket. That is not a bad policy, and it is the only one which may be pursued at the outset of the future capitalist's career. A little later, he can diversify his investments; and there are advantages in having three or four stocks, moderate amounts of each, one or two of them industrials. This latter class of stocks are apt to swing more violently and farther than the railroad securities. In case industrials are added to a man's investments, those stocks are preferable which make public reports and which supply the actual data from which the fortunes of the company can be followed. No need to specify.

### III

#### RATE OF INTEREST ON INVESTMENTS

2 PER CENT A MONTH COMMON A CENTURY AGO.— LEGAL RATES OF THE PRESENT DAY.— THE RETURN NOW TO BE LOOKED FOR ON MONEY AND SECURITIES

**B**EFORE passing on to consider the more important matters, to which these pages are devoted, a few elementary facts should be set forth.

First, what rate of return on investments in bonds or stocks may an investor look for? When a man has saved his first thousand dollars, or when later he has derived some other and perhaps larger sum from his private business or from previous investments, what shall he do with, and what can he get for the use of his money?

If he is in a business capable of extension, the natural use of surplus earnings would be an increase of facilities for carrying on his regular vocation. Goods, tools, machinery, buildings, ships, or working capital would be added to. In a solvent private business, it is held that yearly profits must be around 25 per cent, more or less, in good years, in order that the business may be carried on properly in the lean years, when profits are small, or when, to maintain an organization and keep one's list of customers, the owner is obliged to operate without profit or possibly at some loss for the time being.

Among manufacturing corporations, yearly net profits

range from 4 to 15 per cent, this moderate return being due to the fact that the percentage of profit is figured on the total capital, as represented by the stock and bonds, the capital being inflated in most cases by a very large and perhaps undue issue of securities. Standard Oil has divided between 31 and 48 per cent annually during the last ten years, but this is an exceptional case. If the capital stock of the concern were as heavily watered as that of most industrial corporations, the percentage of profit would be much smaller. In a manufacturing business owned by a private firm or an individual, the annual profits would need to run from 20 to 25 per cent in order to provide against the strain of bad times, which occur regularly and cannot be avoided.

But while such a return on the money invested seems tempting, on the face of the matter, there are many persons who do not care to undertake the responsibilities of private business, with its labors and anxieties, and others have sufficient equipment to hold their own against such competition as they are exposed to. With them, the propriety of other investments presents itself, when a sum of money has been saved beyond the cost of living.

An abundance of investments can be found besides standard stocks and bonds. The scope of this work does not admit of consideration of them. It may be said of stocks and bonds, that they make smaller demands upon the time and personal attention of the investor than do promissory notes, rentable real estate, shares in shipping, special partnerships, and analagous forms of investment. The risk is no greater, provided that an investor is as cautious in one case as in the other, especially with reference

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to the time when he buys and the price he pays. The chances of selling out at a profit are larger. Farther, if one wishes to withdraw his capital from an investment in standard securities, he can do so at any time at a moment's notice, by sale through a brokerage office or a bank, whereas investments of the nature of some of those mentioned above are of a more permanent character and cannot usually be disposed of quickly or to advantage.

The income to be expected from stocks or bonds corresponds rather closely to the average rate of interest on long time loans of money (four months or more) in New York city, the financial center of the country.

In early times, the scarcity of money made interest rates high. It was not at all uncommon to obtain 15 or 25 per cent upon loans or ready money. Wealth was limited and surplus capital extremely small. Supply and demand always regulate rates of interest with an iron hand. The law is effective all over the world. In England, a few centuries ago, and indeed in Europe generally, until the Spaniards began to pour the gold and silver of Mexico and Peru into the old world, ten per cent was the ruling rate of interest. Higher rates were paid by those who needed money badly to those who loaned it. In England, the growing wealth of the country gradually brought the ruling rate down to between 2 and 4 per cent where it stands to-day. If the rate for time loans goes much above 4 per cent in England, now, it is only because money stringency, or possibly a panic, threatens the commercial world. In France, a high rate of interest was current, until the development of industry, the enterprise and the riches of the people caused it to fall to 5 per cent and finally to 2 and 3 per cent. In Germany and Holland, low rates

have reigned for centuries on account of the thrift and prosperity of the people.

In various of the newer sections of the United States, where conditions have been similar to those in early times in the East, high rates were common down to the middle of the last century. Two per cent a month, equal to 24 per cent a year, and even more, was once paid in California and other sparsely settled sections of the Western country. The great profits of the pioneer bankers in the territories and on the Pacific coast were obviously due, in part, to the high price which merchants and others were willing to pay for the use of loanable funds. A trifling incident, which affords an insight into the conditions of forty years ago in the West, is told by an Illinoisan, now resident in New York, who was a small merchant in one of the towns of his State, when he was married. He was then worth \$6,000; and it was agreed between his wife and himself, that when they were worth \$10,000, he would retire from business. He could get 2 per cent a month for the use of his money, and this would yield an income of \$2,400 a year. In those days, it was fashionable to be economical; and the couple did not know what they could do with \$2,400 a year. But Illinois settled rapidly, the people grew prosperous, great crops of grain brought millions of money into the West, and interest rates declined. The time when \$2,400 a year could be realized on \$10,000 of capital passed. Our Illinois merchant is yet in business.

The legal rate of interest, to-day, is 6 per cent in New England and the Middle States; from 5 to 8 per cent in the West and South. Each State has its own laws; but nowhere is the legal rate over 8 per cent.

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It is true that a higher rate of interest is allowed in many of the States, when the parties to the loan agree upon the same by private contract. In the West and South, 10 and 12 per cent is the limit. Money never brings such rates, however, except during periods of great stringency and for a short time. In Maine, Massachusetts, Rhode Island, California, Colorado, Arizona, Montana and Nevada, "any rate" is legal when agreed upon by private contract; and in New York, any rate is permitted on call loans of \$5,000 or more on collateral security. It is under this provision of the law, that such extravagant rates for temporary accommodation were seen in New York city, as 125 per cent in December, 1905, 127 per cent in October, 1896, and 186 per cent in 1899 and 1890.

But while the rates allowed by law on long time loans are as stated, the great borrowers of money in this country can usually obtain ample supplies of capital at modest figures. The cities and States are able to borrow all the funds they require at an average of  $3\frac{1}{2}$  to 4 per cent; and millions have been loaned to the United States government at 2 per cent. Railroads, manufacturers and merchants can, in ordinary times, borrow at  $3\frac{1}{2}$  to 5 per cent, according to their solvency and the amount of security given. In years of considerable stringency, the commercial community which generally has to pay the highest rate of interest, is sometimes charged 7 or 8 per cent on time loans for a short period. In 1873, 24 per cent was charged in New York on commercial paper, and in 1893, 15 per cent was asked, but exceptional cases like these are not to be considered. Rates of that character were simply due to spasms in the money market and were of short dur-

ation. In ordinary times, and for a period of years, the ruling rate of interest on long time loans seldom goes far from  $3\frac{1}{2}$  to 5 per cent for the bulk of the business, with an average of about 4 to perhaps  $4\frac{1}{2}$ . This is the amount of return an investor can expect from safe, sound, approved security investments. Conservative men are even of the opinion, that securities which pay a larger yield on the money invested are dangerous, although this idea is open to discussion.

The range of interest rates on time loans for four months or more in New York city, since 1890, have been as follows:

1890 .....	$4\frac{1}{2}$ @ 9	Average, $5\frac{3}{4}$
1891 .....	$4\frac{1}{2}$ @ $6\frac{1}{2}$	" $5\frac{1}{2}$
1892 .....	$2\frac{1}{2}$ @ 6	" 4 $\frac{3}{8}$
*1893 .....	$2\frac{1}{2}$ @ 10	" $5\frac{1}{2}$
1894 .....	2 @ 4	" 3
1895 .....	2 @ 6	" $3\frac{1}{2}$
1896 .....	3 @ 12	" $5\frac{1}{4}$
1897 .....	$2\frac{1}{2}$ @ 5	" $3\frac{1}{4}$
1898 .....	3 @ 6	" $3\frac{3}{4}$
1899 .....	2 @ 6	" $4\frac{1}{2}$
1900 .....	3 @ 6	" $4\frac{1}{2}$
1901 .....	3 @ $5\frac{1}{2}$	" 4 $\frac{3}{8}$
1902 .....	4 @ $6\frac{1}{2}$	" 5
1903 .....	4 @ 6	" $5\frac{1}{8}$
1904 .....	2 @ 5	" $3\frac{1}{2}$
1905 .....	$2\frac{1}{2}$ @ $6\frac{1}{2}$	" 4
1906 .....	$4\frac{1}{2}$ @ 8	" $5\frac{3}{4}$

\*Some loans were made in July and August at 6 per cent, with 4 per cent commission added.

An investor will therefore look for a return of 4 per cent or a trifle more from money, which he puts into railroad stocks or bonds. If those securities sell at prices which would make the yield 5 or 6 per cent, as they



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usually do in panic years, they are a purchase, assuming that in the case of any particular company, the corporation is solvent and its finances in good shape. A larger return can be expected on industrial investments, which ought to yield from 6 to 7 per cent, ordinarily, to compensate the investor for the larger risk. Bonds are more stable in price than stocks; and those whose soundness is beyond question seldom fall below an investment yield of 4 or 4½ per cent. If the companies which have issued them are strong, and, if for any reason, such as the prevalence of panic or high money, they can be bought to return anything like 5 per cent, they are a purchase.

A discussion is now in progress among financiers and students, as to the probable effect of the increasing gold supply upon prices and rates of interest. It is the opinion of many, that such enormous additions as are now being made to the gold money of the world must tend, in time, to lower the rate of interest and raise the selling price of bonds. This position is strongly opposed by others, of whom Prof. Joseph F. Johnson of New York is one, who maintain that gold inflation must stimulate enterprise and increase the demand for the use of money and thus maintain interest rates. John Moody's theory is, that the rate of interest will rise and that bonds and other fixed income securities will decline, while stocks and those securities whose incomes increase as the production of wealth increases will appreciate in value. While the controversy is interesting, the influence of the flood of gold now being poured into circulation will obviously not be immediate and can only be made clear by the lapse of time.

## IV

### BONDS

**THIS CLASS OF SECURITIES DEFINED.— HOW TO JUDGE OF THE SAFETY OF A BOND.— MARKET PRICES OF VARIOUS ISSUES**

**B**ONDS may be bought through any bank or brokerage house in any part of the United States.

They are issued in denominations of \$1,000 each, ordinarily, although bonds for \$500 can sometimes be bought. They are put forth by railroad companies, public service and industrial corporations, and by municipal, State and the national governments.


A bond is evidence of a loan of money. Every issue by a corporation is secured by a mortgage of some kind, on a portion, or all, of the property of the company; and this document is deposited with a trust company, which acts as trustee. Bonds issued under a first mortgage have priority over all others; and the interest on the whole of the funded debt of a corporation must always be paid ahead of any distribution for dividends on the stock. In case of default in payment of the interest, holders of the bonds may foreclose the mortgage and then, being in full possession of the property, they may reorganize the concern, the first mortgage bondholders having the first claim to consideration.

The growth of the country and the necessity for additional capital have compelled most railroad companies to

issue several different classes of bonds. The value of second mortgage and other junior issues depends on the total value of the property. Junior issues are often practically as safe and sound as first mortgage bonds, because the original issues were not large, and because the property against which they are all a charge is of equal value to, or greater than, the total funded debt, and the company is perfectly solvent.

Debentures are generally considered a junior issue of bonds, because they are printed in the form of a bond, with coupons attached; but they are in fact merely the promissory notes of the company, and they rank as such. If the corporation which issues them is solvent, they are good investments and often bring a premium.


Railroad equipment notes have taken their place as funded debt and are a popular investment. They are floated for the purchase of cars, locomotives and similar equipment. There was formerly some laxity in the matter of this form of railroad obligation but their issue is now based on sound principles. It is conceivable that a railroad, whose equipment notes are offered for sale, might be heavily cumbered with debt and its stock sell below par, without the safety of the equipment notes being affected. The cars and engines are pledged for the payment of the notes; and the company is required to maintain them in good condition. The equipment really belongs to the banking house, which has financed the transaction (or, more accurately, to the holders of the notes) and they constitute the security, which is ample; they cannot become the property of the company until the notes are paid. These notes yield about 5 per cent interest. About \$175,000,000 of them are now afloat.



Convertible bonds are a popular feature of railroad finance. The convertible feature is usually intended to give the bonds a speculative value. They can be exchanged for the stock of the company under certain conditions. The high price brought by Union Pacific convertible 4s in 1905 is eloquent testimony to the popularity of that class of obligations.

An investor in bonds should concern himself, first and foremost, with the question of safety of the investment and assurance of regular payment of interest. Other matters may also be taken into consideration, but they are subordinate to the point above referred to. Until the safety of principal is evident, an investor should never buy a bond of any kind. Safety is the corner-stone of success in all security transactions; and if a man will begin his financial career with this idea firmly fixed in his mind and will always adhere to it, he will have learned the first grand lesson in the building of a fortune and will never have cause to regret his action. If he lacks the facilities, or the education, which would enable him to investigate personally, then he should buy only under the guidance of a bond broker, or a banking house, whose reputation is a guarantee that the securities recommended are of the highest class.

✓ In the final analysis, safety of a bond depends upon the amount of property in good condition, owned by the company; total capitalization; earnings; and priority of other liens. It follows that a prudent man will make an effort to keep himself fully informed with regard to the financial status of the corporations, with whose fortunes he has allied himself. Indeed, he will do well to post himself before he buys. He ought to do this, some time; and



there is no better opportunity than before he has committed himself. One must look before he leaps in Wall Street.

The average capitalization of the railroads in the United States is \$64,265 a mile, of which \$30,837 per mile represents the stock and \$33,428 the bonded debt. To judge whether a road's capitalization is moderate or excessive, it is necessary to consider the nature of the route traversed, whether the line was easy to build or the reverse, whether it is a single track or a four track line, the volume of traffic and the value and cost of terminals in great cities. Capitalizations vary from about \$35,000 to more than \$200,000 a mile. As the bonded debt is a mortgage on the property, its total volume should not exceed about 50 to 60 per cent of the value of the property.

Earnings of the different railroads of the country, for a series of years, and a great mass of other important data, can be found in the Manuals, which are printed by several authorities, annually, revised to date.

Current earnings appear in the annual and other reports of all railroads, which are printed in the financial newspapers as rapidly as they appear. If an investor is not a subscriber to a sound and conservative financial publication, he cannot become one too soon. He will thus obtain all important statements of earnings in detail and as quickly as every other reader. In default of any other method of getting them, an investor can write to the secretaries of the corporations themselves, who will cheerfully supply them. If a corporation publishes no reports, if it locks up in the secrecy of its ledgers and vaults the facts upon which it would be justified in asking for loans of money, the public can protect its interests only by letting

the bonds alone. There are enough good things in the market to make it unnecessary for an investor to plunge blindly into the dangerous business of buying securities about whose value he can learn nothing.

With reference to the safety of any particular railroad bond, one or two general rules apply. It is seldom that any two railroads operate under precisely the same conditions or are in exactly the same position as to the total volume of capitalization or the relative amounts of bonds and stock. If, however, net earnings for a few years past have paid all expenses, all cost of maintenance, the taxes, interest on the funded debt and good dividends on the stock, and especially if, in addition to all that, they yield some surplus besides, the bonds must be deemed a safe investment. It is held by railroad men that, after cost of maintenance has been deducted from net earnings, then from 60 to 65 per cent of the profits should pay all fixed charges, that is to say, taxes and interest on the funded debt. If 80 per cent is required, an investor should take advice as to the propriety of selling his bonds and going into some other security.

The market value of the stock of a railroad is sometimes an excellent guide to the value of the bonds. Large earnings and valuable assets ensure a high price for the stock; and the same factors ensure the safety of the bonds.

Junior issues of bonds are often tempting, because they can usually be bought for less money than those of a higher class. The net return in interest would then be larger. But, if they are cheaper, they may be so, because the risk is greater. The risk is a matter which must be considered.

So far as safety of principal is concerned, the nearest

approximation to the ideal is afforded by bonds of the United States, a country which pays its debts and has a phenomenal record in this respect. Bonds of well governed cities and States belong in this class also. They are always in demand, fluctuate little in value, and can always be sold at a moment's notice.

Bonds are sold by banking houses engaged in the business, on the basis of net yield in income. This basis is calculated on the selling price of the issue, the rate of interest paid, and the length of time it has to run. Tables have been prepared, which show at a glance the net return upon any bond at a particular price. When a bond is said to sell on a 4.1 per cent basis (or any other which may be named) the figure indicates the net return to be derived by an investor, at the selling price named.

The rate of interest paid by good city or railroad bonds is from  $3\frac{1}{2}$  to  $4\frac{1}{2}$  per cent. If a bond is thoroughly sound and pays from 5 to 6 per cent interest, it is certain to sell at a price which will make the net return on the investment as above. In former times, when capital was scarce and rates of interest high, railroads were obliged to bid strongly for money; and millions of dollars worth of bonds were sold by them, bearing from 6 to 10 per cent interest. There are yet afloat about \$520,000,000 of such bonds; but they are being retired as rapidly as circumstances will permit, to be exchanged for securities bearing a lower rate.

Industrial and street railroad bonds pay from 4 to 6 per cent, but, if they are safe investments (which all of them are not), they are apt to sell at a premium, and the net return is in the vicinity of 4 per cent.

That a railroad bond may be dangerous is evident

from the fact, that out of about \$6,873,000,000 of funded debt of these corporations, fully \$275,000,000 of the total pay no interest at all at present.

If a bond sells at a premium, that should not necessarily deter an investor from buying it. If a bond is listed on the New York stock exchange, or if it has a broad and quick market, or if it belongs to the class of savings bank investments, it is apt to bring a premium. Such bonds can be quickly disposed of, at any time, when the investor wishes to realize on them. The speculative investor is apt to give much attention to bonds which do not sell at a premium. And it may be well to say that, at the present time, a number of bond houses are advising the sale of high class, well seasoned and thoroughly sound investment issues, paying 6 per cent or more, which have weathered the gales of adversity and are selling at a good premium, especially if they have only a few years to run. By so doing the investor will capitalize his premium before there is any reduction in price as the bonds approach maturity. If the money were then put into bonds selling below par and having a longer term to run, it is held that income will remain unimpaired, while the investor will put himself in line for another addition to his principal through the future increase in value of the new investment.

Men who care most for safety of principal fill their safe deposit boxes with gilt-edged bonds. Most of them have stocks, especially of the companies with whose management they are identified. But sound bonds, which yield about 4 per cent, constitute the bulk of their permanent holdings. They avoid wildcat securities of every kind and are never found in the category of a resi-



dent of the East, who died ostensibly worth a million and whose estate could show securities for that amount, which were worth absolutely nothing. A few extremely conservative men exist, like the wealthy manufacturer who sold so many millions of oil cloth to the late A. T. Stewart, who never buy anything except bonds and who never sell a good one, even if it has advanced \$100 or \$200 in value. The estates which are left to women and the surplus funds of savings banks and insurance companies are largely invested in this class of gilt-edged securities. These examples embody the best judgment of the most competent men in the field of finance, on the point of safety of capital and certainty of income.

The highest class of investment securities are beyond doubt those which the laws of the State of New York allow savings banks to purchase. They are divided into three classes. In substance, they are as follows:

Bonds of cities of not less than 45,000 inhabitants, which have been incorporated for twenty-five years, and have never defaulted in the interest or on the principal of their debts for more than 90 days at any time, said cities to be located in States which were admitted to the Union prior to 1896 and have never defaulted on the interest or principal of their State debts since 1860.

Bonds and mortgages on real estate, unincumbered, to the amount of not more than 60 per cent of the value of the property.

First mortgage bonds of railroads lying mainly within the State or connected with and controlled by such railroads, provided that there has been no default on principal or interest of their bonded debts within five years of the investment, and provided also that at least 4 per cent in dividends has been paid on all the outstanding stock within the same five years. New York also allows savings banks to buy the first mortgage bonds of certain other railroads, under certain conditions, viz: Boston &

Maine; Chicago & Northwestern; Chicago, Burlington & Quincy; Chicago, Milwaukee & St. Paul; Chicago & Alton; Delaware & Hudson; Delaware, Lackawanna & Western; Michigan Central; Maine Central; Illinois Central; Pennsylvania; Morris & Essex; New York, New Haven & Hartford; United Railroads of New Jersey.

This is, in main, the law; but there are a number of minor provisions and an investor who wishes to be fully informed as to all details should obtain a copy of it for examination.

A good 3½ per cent bond sells in the market for from 95 to par—that is to say, from \$950 to \$1,000. A sound 4 per cent bond sells for \$1,000 to \$1,050 normally; and 5 per cents, from \$1,050 to \$1,200. Prices go above or below these figures in extreme bull or bear markets, and in accordance with monetary conditions. For instance, Union Pacific, 1st lien convertible 4s, sold as high as 160¼ in 1906, owing to the rise in value of the stock, for which they could be exchanged. Any bond, having a long time to run, selling much under the prices above quoted, is of doubtful security. As they approach maturity, all bonds tend to decline to par.

An example of a first class bond is afforded by Central of New Jersey, general mortgage 5s. In the crash of 1903, they never sold below \$1,260 and they have since gone to \$1,360. During the last five years, 65 per cent of the earnings has paid all expenses and fixed charges and left from 8 to 10 per cent or more for the stock.

On the other hand, Colorado Midland, 1st gold 4s, sold in 1905 between 73 and 79. The earnings of the company did not even fully meet the interest on the funded debt.

As an illustration of another class of bonds, may be cited Central of Georgia, 3rd preference income 5s, a junior security. They ranged in 1905 between \$525 and \$835. Other issues take precedence of them. Earnings do not pay the interest on the funded debt. The bonds in question rise and fall, hand in hand with the changing chances of something being paid upon them in the way of interest.

Changes in the market prices of the highest class of purely investment bonds afford small opportunity for speculative profits. They all do fluctuate in price, however, with the times and underlying conditions. No securities are proof against monetary stringency, panics, and long depression; and all are subject to the inspiring and lifting influence of prosperity and a lively demand for investments. Abnormally high rates of interest on money depress the value of bonds for the time being and a prolonged bear campaign in stocks has the same effect. Excellent bargains in bonds can be found in such periods. An investor needs to be alert at such times, if he has money standing idle. He must reason that, in order to make his principal perfectly safe, the bonds he buys must have a good chance of appreciation in value at some later period. Certainly, he would not buy when the signs point to lower prices.

Men who have only a little money to invest and who are absorbed in the management of a private business can give little attention to the monthly changes in the prices of bonds and ought not to try to speculate in them. A class of well-to-do men exists, however, who have the time and a liking for such matters, and who have considerable experience and a knowledge of finan-

cial matters; and they make a specialty of buying broad trading bonds, even if not of the highest grade, whenever there is a smash in the stock market or when extremely high rates of interest prevail. They reason that if the bonds go lower, they can be retained as investments, whereas when the bond market rallies, as it is certain to do in time, the securities can be sold at an advance larger than the percentage of interest which has meanwhile accrued. In this way, while dealing in the class of securities which best safeguards their principal, they add something to their capital.

From 1893 to 1905, Missouri, Kansas & Texas, 1st gold 4s, rose from \$690 to about \$1,040; and Texas & Pacific, 1st gold 5s, advanced from \$590 to \$1,250 or more. United States Steel, 5s, sold as low as 65 in 1903 and have since risen to par.

In the terrible financial reaction of 1903, many bonds fell from eleven to twenty-eight and one half points (between \$110 and \$285) and supplied excellent chances for profitable investment. Among them were:

	High, 1902	Low, 1903	Decline
Atchison, adj. 4s, 1995 .....	97	86	11
Balt. & Ohio, conv. deb. 4s, 1911 .....	118	94	24
Cent. Ga., 1st pref. inc. 5s, 1945 .....	89 ½	61	28 ½
Ch. & East Ills, gen. con. 1st 5s, 1937 ...	126 ½	113	13 ½
Ch., Mil. & St. Paul, gen. mge A, 4s, 1989	117	103	14
Ch., R. I. & Pac., gen. 4s, 1988 .....	113 ⅙	99	14 ⅙
Mex. Central, 1st con. inc. 3s, 1939 .....	36 ½	12 ½	24
Minn. & St. Louis, 1st con. 5s, 1934 .....	124 ½	109	15 ½
N. Y. Central gold 3½s, 1997 .....	109 ½	95	14 ½
Lake Shore, coll. 3½s, 1997 .....	98	87	11
Penna. conv. gold 3½s, 1912 .....	112 ⅝	93 ⅞	18 ¾
Southern Rwy, 1st consol. 5s, 1994 .....	124	111 ½	12 ½
Texas & Pac., 2d gold inc. 5s, 2000 .....	102 ¾	81	21 ¾
Union Pac., 1st lien conv. 4s, 1911 .....	113 ⅞	90 ⅞	23 ¼

In 1905, nearly all of these bonds returned to the high values of 1902 and several of them went higher. Union Pacific 4s sold as high as 150½ and the Central of Georgia bonds above noted went to 101.

There is another class of bonds, which present great attractions to men who are able to assume a business risk and possess the patience to wait a series of years. These are the prior lien bonds of small railroad systems, which range at a low level during periods of depression. Some of the new and yet undistributed bond issues belong in this class of speculative bond investments. As for the bonds of small railroads, there is always the chance that they may be taken into some one of the larger systems, and the bonds will receive favorable consideration in the succeeding readjustment of the finances.

Remembering always that the small investor will, if prudent, have nothing to do with bonds whose safety is doubtful, even then it remains true that he will not buy in the height of a booming market. Indeed, if he then has any securities which are quoted well above the high prices of recent years, he will do well to sell them, bank the money, and bide his time, until the bonds have once more fallen below the average of the last two or three years. He will then reinvest.

Four per cent bonds selling somewhat under par, are now the most popular form of permanent investment.

As an illustration of the changes in price of bonds during any given year or series of years, a few of them are shown in the table below with their highest and lowest quotations since 1890 inclusive:

HOW MONEY IS MADE

Year	Atchison		adj. g. 4s, 1896.		Bklyn. Rap. Transit gold 5s, 1945.		Bnfr., Roch. & Pngh. consol. 1st 6s.		Can. Southern 1st guar. 5s.		Central N. J. gen. mge. 5s, 1937.		Ches. & Ohio 1st con. R. 5s, 1899.		Ch. & East Ills. 1st con. gold 6s.		Ch. & East Ills. gen. mge. 5s, 1937.		Ch. Bur. & Quincy deb. 5s, 1913.		Ch. Mill & St. Paul consol. 7s, 1903.		Ch. Mill & St. Paul gen. mge. A, 4s, 1889.	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1890			112	118	104	110	106	113 $\frac{1}{2}$	92 $\frac{1}{2}$	103 $\frac{1}{2}$	116	122	97	104 $\frac{3}{4}$	116	122	97	104 $\frac{3}{4}$	96	105 $\frac{1}{2}$	122	129 $\frac{1}{2}$	87 $\frac{1}{2}$	96 $\frac{1}{2}$
1891			111 $\frac{1}{2}$	116 $\frac{1}{2}$	102 $\frac{1}{2}$	108 $\frac{1}{2}$	107	112	94 $\frac{1}{2}$	102 $\frac{1}{2}$	118 $\frac{1}{2}$	122 $\frac{1}{2}$	95	100	118 $\frac{1}{2}$	122 $\frac{1}{2}$	95	100	95 $\frac{1}{2}$	102 $\frac{1}{2}$	120	130	81 $\frac{1}{2}$	89 $\frac{1}{2}$
1892			114 $\frac{1}{2}$	121 $\frac{1}{2}$	105 $\frac{1}{2}$	110	109 $\frac{1}{2}$	114	101	107	119	123 $\frac{1}{2}$	97	104	119	123 $\frac{1}{2}$	97	104	100	105 $\frac{1}{2}$	125 $\frac{1}{2}$	132 $\frac{1}{2}$	86 $\frac{1}{2}$	92 $\frac{1}{2}$
1893			112	120	99	109 $\frac{1}{2}$	102	114 $\frac{1}{2}$	90	106	113	123 $\frac{1}{2}$	93 $\frac{1}{2}$	103	113	123 $\frac{1}{2}$	93 $\frac{1}{2}$	103	83	102 $\frac{1}{2}$	119	129	86	95
1894			116	120	105 $\frac{1}{2}$	114	110 $\frac{1}{2}$	117 $\frac{1}{2}$	101 $\frac{1}{2}$	110 $\frac{1}{2}$	118	125	94	101 $\frac{1}{2}$	118	125	94	101 $\frac{1}{2}$	96	102 $\frac{1}{2}$	126	131	89 $\frac{1}{2}$	92 $\frac{1}{2}$
1895			115 $\frac{1}{2}$	122	109	112 $\frac{1}{2}$	111	120	103 $\frac{1}{2}$	112 $\frac{1}{2}$	121 $\frac{1}{2}$	127 $\frac{1}{2}$	96	104	121 $\frac{1}{2}$	127 $\frac{1}{2}$	96	104	98 $\frac{1}{2}$	105	125	129 $\frac{1}{2}$	87	96 $\frac{1}{2}$
1896	28 $\frac{1}{2}$	51 $\frac{1}{2}$	112	120 $\frac{1}{2}$	105	110 $\frac{1}{2}$	110	120	100	111 $\frac{1}{2}$	118	127 $\frac{1}{2}$	94	102 $\frac{1}{2}$	118	127 $\frac{1}{2}$	94	102 $\frac{1}{2}$	85	101 $\frac{1}{2}$	119	132 $\frac{1}{2}$	91 $\frac{1}{2}$	98
1897	41 $\frac{1}{2}$	61	116 $\frac{1}{2}$	123	108	113 $\frac{1}{2}$	106	118	107 $\frac{1}{2}$	114 $\frac{1}{2}$	124	133	98 $\frac{1}{2}$	103	124	133	98 $\frac{1}{2}$	103	93	107	128	142	96	106
1898	54 $\frac{1}{2}$	79 $\frac{1}{2}$	123	125	107 $\frac{1}{2}$	111 $\frac{1}{2}$	109 $\frac{1}{2}$	116	111	118	122	134	101 $\frac{1}{2}$	109 $\frac{1}{2}$	122	134	101 $\frac{1}{2}$	109 $\frac{1}{2}$	104 $\frac{1}{2}$	111	138	163 $\frac{1}{2}$	102	109
1899	75 $\frac{1}{2}$	88 $\frac{1}{2}$	126 $\frac{1}{2}$	130 $\frac{1}{2}$	107	111 $\frac{1}{2}$	113 $\frac{1}{2}$	122 $\frac{1}{2}$	113	121	131	139 $\frac{1}{2}$	109 $\frac{1}{2}$	117 $\frac{1}{2}$	131	139 $\frac{1}{2}$	109 $\frac{1}{2}$	117 $\frac{1}{2}$	108	113	160	174 $\frac{1}{2}$	108 $\frac{1}{2}$	114 $\frac{1}{2}$
1900	78 $\frac{1}{2}$	90	124	128	105	109 $\frac{1}{2}$	117 $\frac{1}{2}$	129 $\frac{1}{2}$	115 $\frac{1}{2}$	121 $\frac{1}{2}$	133 $\frac{1}{2}$	138	112	117	133 $\frac{1}{2}$	138	112	117	108 $\frac{1}{2}$	112	166	185 $\frac{1}{2}$	109	114 $\frac{1}{2}$
1901	86 $\frac{1}{2}$	99	127 $\frac{1}{2}$	130	105 $\frac{1}{2}$	109	127	137 $\frac{1}{2}$	119	122	135	140	115	127	135	140	115	127	108	112 $\frac{1}{2}$	180	194	110	114 $\frac{1}{2}$
1902	89	97	125 $\frac{1}{2}$	129 $\frac{1}{2}$	104 $\frac{1}{2}$	107 $\frac{1}{2}$	132	141	116 $\frac{1}{2}$	123 $\frac{1}{2}$	136	139 $\frac{1}{2}$	120	126 $\frac{1}{2}$	136	139 $\frac{1}{2}$	120	126 $\frac{1}{2}$	106 $\frac{1}{2}$	110	182 $\frac{1}{2}$	196	110 $\frac{1}{2}$	117
1903	86	92 $\frac{1}{2}$	122 $\frac{1}{2}$	125 $\frac{1}{2}$	102	105 $\frac{1}{2}$	126 $\frac{1}{2}$	134	114	119 $\frac{1}{2}$	127	136 $\frac{1}{2}$	113	121 $\frac{1}{2}$	127	136 $\frac{1}{2}$	113	121 $\frac{1}{2}$	104 $\frac{1}{2}$	108	165	178	103	112
1904	87 $\frac{1}{2}$	98	121 $\frac{1}{2}$	124	102 $\frac{1}{2}$	106	128	136 $\frac{1}{2}$	114 $\frac{1}{2}$	120 $\frac{1}{2}$	129	139	129	129	129	139	129	129	103	108 $\frac{1}{2}$	169	184	107 $\frac{1}{2}$	112
1905	83 $\frac{1}{2}$	99 $\frac{1}{2}$	124 $\frac{1}{2}$	130	102	104 $\frac{1}{2}$	132 $\frac{1}{2}$	136 $\frac{1}{2}$	117 $\frac{1}{2}$	122	133 $\frac{1}{2}$	138 $\frac{1}{2}$	117 $\frac{1}{2}$	122	133 $\frac{1}{2}$	138 $\frac{1}{2}$	117 $\frac{1}{2}$	122	102	108 $\frac{1}{2}$	178	187	110 $\frac{1}{2}$	113 $\frac{1}{2}$
1906	91	97 $\frac{1}{2}$	125 $\frac{1}{2}$	128 $\frac{1}{2}$	100 $\frac{1}{2}$	103	125 $\frac{1}{2}$	132	116	119 $\frac{1}{2}$	120 $\frac{1}{2}$	139	116 $\frac{1}{2}$	120	120 $\frac{1}{2}$	139	116 $\frac{1}{2}$	120	102 $\frac{1}{2}$	107	187	196	105 $\frac{1}{2}$	111

BONDS

	Chic. & No. Western deb. 5s, 1933.		Chic. & No. Western general 3½s, 1927.		Chic., R. I. & Pac. 6s, 1917.		Rock Island refunding, 4s, 1934.		O. C. C. & Ind. gen. consol. 6s.		Del. & Hud. Pa. div. 7s, 1917.		Del., Lack. & W'm 7s, 1907.		Exten. 2d Exten. gold 5s, 1919.		Ill. Central 1st gold 3½s, 1931.		Long Island 1st con. gold 5s, 1931.	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1890	104	112			121	132			117	125	140	148	130	136	114	118	90	95	111	117
1891	102	109			118	127			113	121	138	143	129	135	112	118	89	92	110	116
1892	105	109			121	126			118	123	138	142	130	135	114	117	90	95	113	117
1893	103	112			114	126			115	123	135	138	125	130	106	115	92	98	108	116
1894	106	112			123	131			117	123	140	144	130	134	112	116	93	100	113	118
1895	104	112			126	132			119	126	143	143	130	132	114	116	97	104	117	123
1896	104	114			119	131			124	127	136	143	125	130	112	116	99	104	117	120
1897	110	117			128	134			123	128	142	147	125	128	116	122	101	101	113	119
1898	114	120			129	134			127	132	145	146	122	128	116	119	102	105	117	124
1899	115	123			130	136			131	137	145	148	126	126	115	121	103	107	120	124
1900	118	125			129	133			128	137	146	148	125	124	119	119	104	106	120	122
1901	121	125			127	132			133	138	145	147	117	123	119	121	104	107	121	123
1902	117	124			128	132			138	138	140	144	114	120	118	122	104	105	117	122
1903	114	118			121	127			127	133	136	137	111	117	111	113	99	102	118	118
1904	115	118			121	130			128	130	133	134	109	115	112	113	101	102	116	118
1905	116	119			120	126		97	131	135	134	134	106	110	101	103	101	103	115	117
1906	113	117			117	120		91	134	135	133	133	104	107	109	114	99	100	113	117

HOW MONEY IS MADE

	Louis. & Nash. gen. mgo. 6s.		Louis. & Nash. coll. trust 5-20 4s, 1923.		Minn. & St. Louis 1st gold 5s, 1934.		N. Y. Central gold 3½s, 1907.		N. Y. Chic. & St. L. 1st 4s.		Nort. & Western 1st con. 4s.		Pennsylvania Co. 1st con. 4½s.		Pennsylvania R. R. conv. 5 3½s, 1912.		Reading General 4s, 1907.		Rich. & Danville con. 5, 6s.	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1890	110	116½							88½	90½			105	110½			75	87	112	118½
1891	112	117						89	96			102	108½			74½	86	107½	118	
1892	115½	120						95	100			103½	108½			83½	90½	105½	112	
1893	107	119½						89½	99½			102	110½			59½	85½	102	111½	
1894	109½	119½						97½	102½			106	113½			67½	80	106½	121½	
1895	114	120			97½	104		101½	107			109½	116½			67½	91½	118	122½	
1896	110	117½			96	103½		99½	105			105½	113½			67	87½	110½	121½	
1897	115½	119			100	107½		103½	108			109½	115½			79½	82	117½	124½	
1898	116½	121			100	110		100	107½			74½	80½			77½	89	118	127	
1899	115½	121			110½	116½		104½	109			87½	96			82½	90½	120	126½	
1900	116	122			111½	119		111½	104½			90½	100			83	96½	119	126	
1901	112	121			99	102		106	109½			99½	104			92½	100½	121	124½	
1902	115½	122			100	115		104	109½			99	104½			95½	101	119	122½	
1903	114½	118			100	101½		95	104			94½	101½			93½	98½	114	118	
1904	115½	122			113	118		96½	102½			96½	102½			94½	103½	114	118	
1905	119	122½			97½	100½		98½	100½			100	104½			100½	104½	114½	118	
1906	114½	120½			95½	100½		91½	99½			98½	102½			98½	102½	112½	116	



BONDS

	Rome, Wat. & Og.		St. Louis & San. Fran.		Son. Pacific,		Southern Rwy.,		Texas & Pacific,		Union Pac.		U. S. Steel,		Wabash,		Wheeling & L. E.,		Western Union,	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1890	105	112½	105	115					34	40					93	105½	102½	108½		
1891	105	114	103	110					27	35½					96½	103½	102½	106		
1892	111½	115½	106½	111					25	34½					102	107	104	109½		
1893	104	115	94	111½					13	29½					93	106½	101½	107½		
1894	113½	119½	82	106½			86½	91½	17½	28½					101½	107½	100	108		
1895	113½	116½	102	112			84½	99½	17	31½					100	109½	97½	106		
1896	115	119½	101½	114			76	94½	13½	24½					99	109	96	102½		
1897	117½	122½	108½	119½			87½	95½	18	33½					101½	108½	85	93		
1898	119½	130½	114	125			87	106	28	50½					104½	114½	100½	103		
1899	123½	132	122	126½	73	87½	103½	112½	45½	56½					112	118	104	110½		
1900	125½	129½	121½	130	78	85½	106	114½	53	90					113	118½	107	116		
1901	125½	129	125	136½	83	95½	111½	124½	90	100	103	129			117	120½	112	117½	105½	109½
1902	118½	127½	130	134	89	96	118	124	96	102½	103	113½			115	121	113	115½	103½	109½
1903	117	122½	120	129	84	92½	111½	118½	81	100	90½	107½	65	87½	112½	118	112	116½	100½	105
1904	115½	119½	122½	130½	87½	96½	111	121	80	98	94½	116½	68½	95½	114½	119	109½	114	101½	106½
1905	116	119½	129½	132	92½	97½	117½	121½	93½	102	112½	150½	92	99½	114½	119½	113	116½	104½	107½
1906	111½	118	125	128½	88	95½	115	119½	85	102	95½	101½	95	101½	112½	116½	113	116½	100½	103

## V

### STOCKS

THEIR NATURE.— ADVANTAGE OF PREFERRED STOCKS.— THE NON-DIVIDEND PAYERS.— HOW TO JUDGE OF THEIR VALUE

**T**HE purchase of a share of stock is an investment in the business, exactly as though the buyer were a partner in the enterprise. He is in fact a special partner to the extent of the value of his holdings; and he is not responsible for the debts of the concern beyond the face value of his stock.

The stocks of most of the railroad companies and the leading industrial concerns have a par value of \$100 a share. Perhaps fifty American railroads, most of them in the State of Pennsylvania, issue shares of \$50 each; and while the majority of these lines are small and obscure, yet the list includes several of the great corporations, among them the Pennsylvania, the premier railroad of the United States, the Reading, Lehigh Valley, and Delaware, Lackawanna & Western, and, in New York State, the Harlem and the Long Island. Two or three short lines have \$25 shares; and Wyoming has a little one, with \$10 shares. In the case of the Grand Trunk of Canada, the shares have a par value of £100 each or \$500 in American money.

Mining shares are usually issued in small nominal par value; but such stocks are seldom listed or traded in on the New York exchange.

The \$50 or half shares, as they are called, are quoted in New York on the basis of \$100 a share. When one buys Reading, for example, at \$140, he really acquires two shares at \$70 each.

Stocks of every description can be bought through any regular banking house or broker, whether they are traded in on the exchange or not.

Stocks are divided into two classes, common and preferred. The common stocks, when the two classes are issued, are entitled to all the profits after fixed charges and preferred dividends are paid. Some of these common stocks are of very high value. There are a good many however upon which no dividends are paid at present and the chances of any dividend are so remote, that their value resides mainly in the voting power.

Preferred stocks have the priority as to dividends and usually as to assets, in case of a reorganization of the company. Those of the railroads are as a rule non-cumulative, while most of the industrials have the cumulative dividend feature. That is to say, if the stock is a 7 per cent cumulative issue, and if the company is unable to pay the full 7 per cent in any year, the arrears of dividends must be paid in full (in cash, stock or bonds) before the common stock can hope to share in any distribution of profits. It was necessary in 1905, to reorganize the United States Leather Company entirely, as the Central Leather Company, to provide for the 40 per cent of arrears of dividends and eliminate the 8 per cent cumulative feature from the preferred stock. It is desirable that an investor should acquaint himself fully as to the peculiarities of a preferred stock before he buys it. The non-cumulative feature is held to be favorable to the common stock,

because should any dividend on the preferred be omitted or reduced, the common stock will enjoy a better chance of dividends during the next period of prosperity of the company. Different policies are in vogue as to preferred stocks. St. Paul has a 7 per cent non-cumulative preferred; and after 7 per cent has been paid both on that and the common stock, then both classes share equally in any division of profits over 7 per cent.

The price at which stocks can be bought is quite another matter from their par value. A good 4 per cent railroad stock is worth normally around par, that is to say \$100 a share. It sells above or below this price, in sympathy with earnings, assets, total capitalization, and the rest of the market. If earnings are first rate, if dividends are entirely assured, and the general market is booming, 4 per cent railroad stocks often sell at from \$110 to \$130 a share or more. (Reading sold as high as \$164 in the Winter of 1905-6.) That is more than true investment worth, because at \$130 a 4 per cent stock pays only  $3\frac{1}{8}$  per cent on the investment.

If earnings are falling off, if depression reigns, loans bring high rates of interest and a bear market is annihilating fortunes, good 4 per cent railroad stocks can sometimes be bought for \$55 to \$85 a share, as witness the prices of 1903. At those quotations, such stocks would yield from 5 to 7 per cent on the purchase money, and they are a bargain, provided always that the finances of the company are not impaired.

The 5, 6 and 7 per cent railroad stocks sell, normally, around 125, 150 and 175 a share, respectively. They soar above those prices and sink below them with the times and in accordance with a wide variety of technical

conditions. In a bull market, they tend to go above investment value, and, in a prolonged bear market, much below.

It is assumed that an investor will confine his attention entirely to standard stocks, traded in on the exchanges. No others can be bought promptly at ruling rates or sold to advantage. In the multitude of shares, which are listed on the exchange, which are the ones deserving of confidence?

The dividend payers will naturally have the preference. It is not every stock which is in that fortunate class. The Inter-State Commerce Commission reports in 1904 show that, whereas the steam lines of the United States had issued a total of about \$6,400,000,000 of capital stock, yet on more than \$2,600,000,000 of the aggregate there was not, and had not been for years, any annual distribution of profits. A scant half of the enormous total paid 4 per cent or more. Among industrials, the common stocks of a majority pay no dividends. Obviously, no security will attract a conservative investor, unless it supplies him with an income, and not even then, if the price is too high.

As for the non-dividend payers, to buy them is to enter upon a speculation. Whatever the future of any such stocks may be, the novice and the man of moderate means should beware of them, except in rare and specific cases. If he has access to an honest and candid official of the company, a banker connected with the property or any other source of trustworthy information and is assured that earnings are large and a dividend will be voted at an early date, the purchase of such a stock while it is cheap may be justifiable.

No one can deny that a few non-dividend payers have enriched their holders. American Smelting, common, rose with its earnings from  $\$36\frac{3}{4}$  in 1903 to  $\$174$  a share in 1906. Reading rose from  $\$37\frac{1}{2}$  in 1903 to  $\$164$  in 1906. But a man with a moderate amount of money to invest should resolutely turn his back on stocks which do not afford him a dividend from the start. Neither of the two stocks above referred to attained their recent extremely high prices, until long after they had been placed on a dividend basis, and gave a promise of even larger payments.

In selecting a stock for purchase, an investor must aim to guard the safety of his principal, first of all, and next consider the certainty and amount of the income. These are the vital factors. A man should especially avoid being swept away from the moorings of common sense by the bullish furor, which reigns among all classes of our people at intervals. It is sometimes better to buy a sound stock and secure a moderate income than to strive for 7 per cent and endanger the safety of capital. It is a saying, attributed to one of the Rothschilds, that a man must decide whether he would prefer to sleep well or eat well. If the capital be safe, even though the income be moderate, the investor will sleep well. If the income be large and enable him to eat well, he may have to spend many restless nights in consequence of a reduction of income and a shrinkage of his capital, in bad times.

A partner in a private firm is entitled to look at the books. He has a right to know how much money the concern is making, or, if the business is going backward, to know that fact also. No man in his senses would ever

enter a private firm without full knowledge of its affairs. Why should he do so in a corporation, without similar knowledge? In the case of most railroad companies, as hereinbefore intimated, it is perfectly easy to "look at the books," or in other words, to obtain the reports of earnings, etc., for examination. A few of the more popular industrial companies also issue statements, although some of the larger ones do not. If earnings are ample, even in bad times, to pay all fixed charges on the funded debt, all taxes and cost of maintenance, and all dividends, and leave something over for the surplus fund, the stock must be considered a safe investment, if bought when the price is low.

The preferred stocks of industrial companies, and the common stocks of such strong concerns as American Sugar Refining are so excellent with respect to the income they afford, seldom less than about 7 per cent, that regret must be felt at the lack of regular reports of earnings and assets. To buy some of these stocks is to leap in the dark. If there could be such governmental supervision as to ensure annual reports at least, the public would be benefited greatly; and it is difficult to understand why the corporations themselves would be injured, although, in fairness, it must be said that some of the companies consider that they would be.

Union Pacific now pays 10 per cent and earns more than 14 per cent for the common shares, while possessing assets of enormous value. The knowledge of this imparts a high value to the stock. Reading pays 4 per cent and earns more than 10. St. Paul pays 7 per cent on both classes of its stock and earns 14 for the common stock. United States Steel, preferred, is another example of a

security paying an excellent dividend, 7 per cent, and earning far in excess of all charges, even in bad times. The public knowledge of these things, derived from the minute and excellent reports of those corporations, has never proved an injury to the stocks.

It does not follow, however, because the foregoing or any other standard stocks are good, sound investment securities, that an investor should go into the market at the particular time when he happens to have money to invest and buy at the prices then ruling. Men of long experience do not do that. They keep their money in the bank, where it is safe, or loan it out at interest, and wait. There is a time for all things, and certainly there is a time to buy and a time to sell. So far as safety of capital is concerned, the ideal is most nearly attained by buying in times of great depression, or during a panic, when stocks are below their actual investment worth. The margin of safety on a purchase is then the largest. It is no time to buy after a prolonged and extensive rise. A glance at the prices of leading stocks for the last fifteen years, on another page, should teach caution in the matter of buying.

Governed by the lessons of experience, the wise investor waits patiently until he can go in with the certainty that the prices will not go much farther, if any, against him, and on the other hand, that they are likely to recover. His capital will then be in no danger of impairment. This is the one great lesson to be learned by an investor in stocks. He is liable to incur some heart-breaking experiences unless he masters it.

As between a number of stocks, all equally solvent, and all paying a proper income, an investor will naturally



consider the future worth of the properties. He would do this in any of the ordinary transactions of business life. The margin of safety is affected by future worth. It is on this account that railroad stocks are generally held to be better investments than industrial shares. The possession of coal and other mines and lands, the growth of population, the fertility of the soil in regions traversed by the lines, the ownership of valuable terminals in cities, the development of manufacturing interests along the routes of the roads, and the improbability of new and serious competition, tend continually to add to the value of railroad properties in general. In the case of industrial concerns, the ownership of patents, the trend of the times with reference to such matters as the substitution of electricity for steam for motive power, the control of the sources of supply of iron ore and oil or other raw materials, and the liability to disturbance through tariff or other legislation, must be considered.

Future worth is the only consideration in the matter of non-dividend paying stocks. No one would buy them on an investment basis, and not even as a speculation, unless it were expected that the properties they represent had a great if distant future. Many of the common stocks of the present day are in the position of those of a number of railroad lines built in the '80s. The roads in question were constructed by men who had confidence in the country and looked entirely to the future for a proper reward upon their investments. Their common stocks, long worthless, rose in value with the settlement of the country; and some of them rank among the gilt-edged securities of to-day. Any one who buys such stocks would naturally do so, moderately and only after patient

investigation, and he would resign himself to the "long pull." Such stocks are never to be bought unless they are depressed in price.

Industrial stocks have come to stay. Some of them have been tried by times of depression, have been attacked in the courts under the anti-trust laws, and subjected to the strain of changes in the tariff laws. They have survived every adverse influence. American Sugar Refining is one of this class. The regularity of their dividends and the surplus profits which they have earned justifies their rating as good investments, if bought when they are low. The best of the industrials, with a few striking exceptions, are those which do not issue bonds. If dividends are cumulative, so much the better for the stock. The United States Steel stocks are in a class by themselves. This concern has issued bonds but has accumulated a surplus of about \$100,000,000. United States Steel preferred, may have to weather other storms but seems bound to enter the investment class of stocks, owing to its extensive control over the beds of iron ore in this country.

There are enough good and sound stocks in the general lists of the exchanges to answer all conservative investment demand. A prudent man will avoid those which are not listed and those which are new and unproved, no matter how alluring the prospectus of the companies. When the time comes to sell, standard stocks find a prompt and satisfactory market at ruling quotations. Those not listed can generally be sold only at a sacrifice.

It is sometimes asserted that it is the actual investor who runs the most risk. This is not a fair statement. On

the contrary, it may truthfully be said that if an investor buys with judgment, no one runs less risk than he. Under the worst possible circumstances, the owner of a share of stock risks only the surplus profits which he has put into the investment. Should the company waste its assets, or incur a crushing loss from fire, or, for any other reason, become so utterly bankrupt that nothing is left for the stockholders—an almost unheard of case—the investor has lost merely the sum he paid for the stock. This would be bad enough. But, on the other hand, if he were speculating and carrying stocks on a margin, or if he were in legitimate business and affairs were going badly, he would risk not only such surplus profits as he has turned back into the business but also all, or a large part, of his remaining capital. Wall Street and the field of legitimate enterprise both supply a long list of insolvencies every year. The number now ranges between 10,000 and 12,000 annually. In the throng one looks in vain for the names of conservative actual investors in stocks.

Men of large means do not, as a rule, buy extensively into the stocks of any company, unless they expect to or already take part in the management. An active part in the direction is, of course, entirely beyond the small investor; but when a stock is low in price, and it is discovered that strong men are accumulating it on a large scale, for any purpose, this is a sufficient guarantee that a purchase would be safe for any one.

When Henry C. Frick bought so largely of Reading, and when John D. Rockefeller, jr., bought 100,000 shares of Union Pacific (the price being moderate in both cases) in 1904, a boom followed in both of those stocks;

and the subsequent rise in values showed how safe it would have been for others to acquire Reading and Union Pacific at the same time.

H. H. Rogers was once asked by a friend, who had more courage than most men could have summoned for such a purpose, for a tip on the stock market. Mr. Rogers replied that he might let his friend in on a deal, then in progress in American Sugar, in which at the time they stood to lose \$300,000. The friend did not buy; but, if he had stopped to reflect, he would have reasoned that when a man like H. H. Rogers had bought a large quantity of American Sugar stock, he would never in the world have let go of it until the purchase showed a profit. As a matter of fact, the stock rose in value and the deal was closed to the advantage of all concerned.

In a later chapter, suggestions will be made as to the time when, and the circumstances under which, an investor can buy stocks, with the assurance that his principal will be safe and that the purchase will bring him an increment on his capital. It can do no harm to insist upon the point; that, unless a stock is going to rise in value, within a few months or a year or so, no one should buy it, even as an investment.

## VI

### CYCLES OF PROSPERITY AND DEPRESSION

THE FIVE, TEN AND TWENTY YEAR PERIODS.—FACTORS WHICH INVARIABLY FORERUN A CRISIS.—HOW STOCKS FORESHADOW THE TURN IN AFFAIRS

**T**HE fundamental point in making money on security investments is to know when to buy them and when to sell.

If the reader is a man of impatient temperament and must positively know conclusions first, without reference to the facts upon which they are based, he can skip a good many pages of this work and read the last chapters first. But if he is a man of sound mind, and if he should refuse, as he ought to, to take any one's conclusions without knowing how he arrives at them, he will be compelled, sooner or later, to examine the premises upon which they are based. He might as well proceed, therefore, in an orderly way, making sure that the ground is firm under his feet as he advances. He will then follow the evolution of the writer's argument, in the manner in which it is here set forth.

Foremost among the factors, which influence the price of stocks, is the recurrence of cycles of prosperity and depression. So intimate is the relation, which exists between the price of stocks and bonds and the prevalence of good or bad times, that the subject is of the first importance. Considerable space will therefore be given to it here.

If furnace fires are blazing and mills are overwhelmed with orders, if granaries are bursting with the harvests, and railroad managers are at their wits' end to find cars for the traffic which pours in from every quarter, then profits are certain to be large in every vocation, thousands of men will have surplus profits to invest, and Wall street will respond to the dominating optimism of the period and bull the prices of stocks and bonds. When the times change, prices will; and they will fall. Iron is said to be a barometer of the times. The price of iron certainly shows the actual state of trade. But a genuine barometer is an instrument which foretells a change in conditions before the clouds have actually broken away or gathered overhead. The most sensitive of all of them is the market prices of stocks and bonds.

Since the world has become civilized, good and bad times have succeeded each other at more or less regular intervals. History has repeated itself also in the general sequence of events from one serious crisis to another and in the causes which bring them to pass.

Most writers on finance concur in the statement, that the interval from one crisis to another is from ten to twelve years and that the period is slowly but gradually lengthening. Prof. W. S. Jevons, of England, cites as dates of crises in the British Isles, the years of 1701, 1711, 1721, 1731/2, 1742, 1752, 1763, 1772/3, 1783, 1793, 1804/5, 1815, 1825, 1836/7, 1847, 1857, 1866 and 1878. Prof. Jevons sought to connect these upheavals in business circles with the periodicity of sun spots which reach their maxima every eleven years. The notion seems fanciful. Human nature itself affords a sufficient explanation of all the phenomena of these great changes in the times, without

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referring them in any way to sun spots or the action of the planets in their courses.

A crisis invariably starts with money stringency and unobtrusive liquidation in securities and speculative ventures leading up to and bringing about the collapse of some great bank or business firm or some startling exposure of fraud, shaking public confidence at the very height of good times and spreading consternation and terror among all men, who are committed to speculative ventures or struggling business enterprises. A panic follows; and the fright in business circles causes a reaction in trade. The first stage of a cycle ordinarily lasts three or four years. Its characteristic traits are dwindling trade, a fall in the price of securities, smaller earnings, retrenchment in all expenses, lower wages, strikes, the closing of factories, discharge of surplus employés, and all the other melancholy concomitants of hard times. Dry goods and other firms and banks collapse by the hundreds. Tramps throng the highways and beggars the cities. All classes feel the depression. There is commonly a temporary rally after the first great shock and a second period of less violent liquidation.

Three or four years succeed, forming the second stage of the cycle. A better feeling gains ground among business men. Mills reopen, merchants buy larger stocks of goods, labor is again in demand. Good times are seen to be near at hand.

The third and last stage of the cycle is attended by a renewal of the conditions, which caused the last crisis and will precipitate the next one. A boom breaks out, in all parts of the country. Goods bring higher prices, factories are rushed to their full capacity, trade is active, stocks

rise to unheard of prices, and every one makes money. Usually, there is a great speculation in real estate. A characteristic trait of this stage is prodigality in personal expenses. To use the words of Franklin, the poor see with envy on every side "luxury of dress, luxury of equipage, luxury of the table." New enterprises are launched in great number, and the market is burdened with enormous issues of new securities. Prosperity itself brings on fatal weakness. Operators of every kind borrow money for their respective ventures. Bank resources, ample at first, soon begin to be overtaxed. Bank loans are excessive and soon run ahead of deposits and the money supply is depleted; interest rates rise; available cash grows scarce; and every weather signal of finance points to a coming collapse, which begins as usual with quiet but long continued liquidation, a panic and a smash in stocks. The third period fills out the ten or twelve-year cycle.

Every twenty years, the reaction seems to be more severe than the intermediate one.

In the United States, crises have occurred at fairly regular intervals, in spite of the fact that the exploiting of the rich resources of a new country has from time to time changed underlying conditions suddenly, and of the other circumstance that an American stands less in awe of precedent than do the people of Europe. If, for instance, it should ordinarily take five years in Europe to pass from the top to the bottom of a cycle, attention would not necessarily be paid to that rule here. A variety of causes operate here to interfere with the orderly succession of events in the middle period of a cycle. Crop failures, political changes, rate wars between railroads, laws on the currency and the trusts, and such matters as the discovery



of gold in California and oil in Pennsylvania, have each played a part in affecting the regularity of movement. Owing to the growing closeness of relations with Europe and to more settled conditions here, it is probable that, in the future, the United States will pass from one extreme of prosperity to the other in a more orderly fashion.

History records the occurrence of crises in business affairs in America in 1791/2, 1814, 1826, 1837, 1848, 1857, 1864, 1873, 1884, 1893, 1896, and 1903. A brief review of each is presented. The attention of the reader is asked particularly to a remarkable feature of the action of the stock market, with reference to crises. Almost invariably, the rise in stocks has begun a year or more in advance of the actual betterment in trade and manufactures. The advance has culminated, as a rule, from one to three years before the actual crisis has arrived; and it has often been the long decline in stocks, which has finally precipitated the failures of banks and capitalists and brought on the panic.

The rapid review of crises in America which will now be presented does not assume to be a history of Wall street; but each turning point in affairs will be sketched with sufficient detail to make the causes and circumstances clear.

#### CRISIS OF 1791/2

TRADE conditions and money stringency led to America's first serious reaction and financial panic. Alexander Hamilton, Secretary of the Treasury, bought bonds to relieve the situation. Confidence was restored, and order brought out of chaos, largely through the operations of the first United States Bank, chartered in 1791.

## CRISIS OF 1814

A DECADE of prosperity was enjoyed by the States after 1792; but the War of 1812 and the embargo and non-intercourse laws finally made trouble by almost annihilating foreign trade. From a total volume of \$246,843,000, in the fiscal year ending September 30, 1807, foreign trade had fallen steadily to \$19,892,400 in 1814, the smallest in the whole history of the republic, before or since. Exports were less than the pitiful sum of \$7,000,000. American ships, long so profitable, were practically idle.

The country was extremely dependent upon foreign manufactures and these could be had in proper quantity only by smuggling through Canada and the ports of New England. The goods were marketed by the merchants of Boston, to whom immense sums were owing by the rest of the country. In 1814, Boston drew on New York and Philadelphia, which were distributing cities, for the cash. Those cities called in their money from the sections tributary to them. Specie was drawn from the doors of banks in New York and Philadelphia, by the wagon load, for shipment to Boston and Canada. Scarcity of cash in the United States caused general alarm and prepared the way for the panic. The United States Bank had disappeared in 1811; and the State banks had too limited a capital to carry the States through the crisis. They were already staggering under a heavy load of loans and could do no more.

When the city of Washington was captured by British troops, Aug. 24, 1814, and President Madison took refuge in a Virginia forest in a heavy rain, a panic was the quick

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result. In Baltimore, Philadelphia and New York, the banks suspended specie payments, Aug. 26 and 31 and Sept. 1, respectively. The banks in New England and a few in the West weathered the storm, but in all the rest of the country suspension of specie payments was general. Hundreds of business firms were wrecked and depression reigned throughout the country. Wall street was affected, of course, but trading was limited then to a few varieties of bonds and stocks, and the troubles of Wall Street figured to an unimportant extent in the universal distress.

In England, inflation and depreciation of the paper currency led to panic and reaction in 1816.

### 1819—END OF THE DEPRESSION

**HARD** times lasted for several years. It is true that there was some rebound after the panic. Merchants did fairly well. New lands were being rapidly settled. A flood of paper money was poured out by the State banks, and, after April 10, 1816, by the second United States Bank, which gave a stimulus to enterprise and speculation. But the moment had not arrived for a general forward movement.

Manufacturers felt the hardship of the times the most, owing to the lack of protection under the tariff laws. Many went out of business, especially the weavers of woolen goods, who could not withstand the competition of British mills, enormous quantities of whose productions were dumped on the wharves of our sea-coast cities for sale at auction. Imports were excessive. The balance of

trade ran heavily against the United States, amounting in four years, ending Sept. 30, 1818, to more than \$165,000,000, a sum too large to be paid from the rich earnings of American ships. It was imperative to pay for the goods and this evil was soon made worse by another.

Paper money having naturally depreciated, specie was withdrawn from circulation. To remedy this trouble, Government and the banks united in an effort to lessen the volume of paper money afloat. State banks, whose circulating notes were deposited in the United States Bank and its branches, were called upon to redeem them in specie. Many of them retired a part, or all, of their bills. According to A. S. Bolles, the volume of paper money was contracted from \$110,000,000 in 1816 to less than \$65,000,000 in 1819. This drastic proceeding brought on the inevitable collapse in the business world, starting in the Fall of 1818. New enterprises were laid aside until a more convenient season and many bankruptcies occurred. Edmund C. Stedman calls this the crisis of 1818. As the crisis of 1814 became acute through a panic, so the depression virtually ended in one. The trouble was caused by the lack of ample supplies of money at a time of great national growth.

#### CRISIS OF 1826

AFTER drastic liquidation, economy and curtailment of all new commitments in business, courage revived; and when better times dawned, business men took hold again with characteristic American spirit and promptitude.

A protective tariff enacted in 1824 inspired fresh animation in home industry. Imports were cut down, exports

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were larger, and, in fact, during the six years, ending Sept. 30, 1825, they nearly balanced, excess of imports being only a trifle more than \$30,000,000. Money was in ample supply.

Public works were built on an extensive scale and labor found good employment. The new life in every department of affairs led easily and in the usual way to speculation, always the bane of good times. The country went ahead too fast; and once more the banks could not meet all demands for accommodation. When a reaction in trade started in England, late in 1825, money stringency ruled here and put a stop to all new ventures. In 1826, a crisis occurred in the United States, with many failures, including the Franklin Bank and Jacob Barker. In England, the depression was fearful.

### 1831—END OF THE DEPRESSION

MODERATE gold imports after 1826 led to a short revival of confidence. But the trend was downward for several years. Gen. Jackson was fighting a battle royal against renewal of the charter of the United States Bank and a reduction of tariff duties was being debated in Congress. In 1831, a rush of foreign goods turned the tide of gold outward. The times were extremely difficult and enterprise was at a low ebb. By 1831, liquidation had ended, a slow improvement began, and the turn had come.

### CRISIS OF 1837

THEN followed a term of six years of halcyon days. This was the first era of active railroad building; and by

1837, the twenty-three miles of pioneer railroad line of 1830 had grown to 1,497. The demand for material and labor for these works proved an immense advantage to industry.

General business also steadily grew better and all classes of producers and traders enjoyed a boom.

The Clay compromise tariff of 1833, while not stimulating in its effects, ended the uncertainty which had prevailed, at any rate; and although duties were to be lowered gradually until 1842, no serious consequences were felt for several years.

As time rolled on without any serious check to the growing optimism of the period, a vast variety of new enterprises were launched, and deposit of the surplus revenues in the State banks aided in kindling the flames of a wild speculation. Securities attracted little attention, but a mania broke out for trading in lands, ships, agricultural products and manufactures, such as had never before been witnessed in this staid and old-fashioned country. It is recorded that prices were paid for city lots, in some cases, never afterward known. The famous *morus multicaulis* speculation was an incident of those times, rivalling the historic tulip mania in Holland. A furious carnival of trading broke out especially in Government lands, payment being made for them in State bank notes. That which was bought to-day at any price was sold to-morrow at a profit, and exuberant enthusiasm prevailed among all classes.

While the times were buoyant beyond previous experience, underlying conditions were changing. Imports grew to extraordinary figures and the balance of trade against the United States rose from \$13,601,000 in 1832 to

\$52,240,000 in 1836. Gold was kept at home by reason of the large earnings of American ships and the investment of foreign capital in American railroads and other ventures. Indeed, a few millions of gold were imported, every year. But the eager demand for money to finance land and every other kind of ventures kept pace with increased money supplies and finally ran past them. Loans expanded steadily at the banks and at one time specie holdings did not exceed  $7\frac{1}{4}$  per cent. of the loans.

A great fire in New York, Dec. 16, 1835, inflicted serious loss on that community and was one influence tending toward the final reaction.

April 10, 1836, the second United States Bank came to a stormy end, so far as its Government charter was concerned; but it went on for a few years under a Pennsylvania charter and its reckless loans did not improve the general situation. Early in 1836, credit was almost at the breaking point.

October 23, 1836, a small panic in Wall Street heralded the coming crisis. President Jackson did the rest. Jan. 1, 1837, he began to call in from the banks the nearly \$37,500,000 of the surplus revenue on deposit among them for distribution to the State treasuries. By April 1, half of the amount had been paid in, but to meet the payments the banks were obliged to contract loans. The country was on the brink of disaster.

May 10, 1837, a frightful panic broke out in the financial world and all the banks suspended specie payments. Prices of stocks, lands and goods fell in a twinkling and fortunes vanished in a day. Extensive liquidation took place; and there were over 300 failures in consequence of the crash. In New York, J. L. & S. Josephs,

agents for the Rothschilds, and, in Philadelphia, the United States Bank, went down among others. The distress was caused, in a measure, and was aggravated, by a partial failure of the crops, high prices for grain and necessary imports of breadstuffs. A shortage in the annual contribution to the wealth of the country from the wheat and corn fields is never a greater calamity than when affairs are trembling in the balance.

The crisis of 1837 is generally regarded as a "land panic." The prostration in trade lasted for several years. The bank crisis in the United States proved disastrous also to England. Insane speculation had been in progress there, precisely as here, and was ended in 1837 by panic, reaction and commercial distress.

#### 1843—END OF THE DEPRESSION

THE turn upward came in 1843, partly through the favorable nature of the new tariff of 1842 and hand in hand with an enormous decline in imports. In 1843, foreign commerce yielded a net balance of \$40,392,000 in favor of the United States, much the best showing in the history of the country up to that time. For fifty-three years previously, there had been a balance in favor of the United States ten times only—1840 having been the best year, when excess of exports was \$25,410,000. In all vocations, depression had been severe. Railroad building was a good barometer and had fallen off from 416 miles of new line in 1838 to 159 miles in 1843. Similar dullness existed in all other branches of enterprise. By 1843, liquidation had been completed.



## CRISIS OF 1848

WHEN hope finally revived, men of ability gradually found courage to embark once more in the work of development. Factories and mills began to experience a better demand for their products. Pig iron making is always an indication of conditions, and this trade flourished in particular, the output rising from 215,000 gross tons in 1842 to 800,000 tons in 1848. Trade sprang up and profits were large. Railroad building was resumed and went forward with a rush. Good times soon reached every city and settlement; and both capital and labor found full employment and reaped a rich reward therefrom.

The War with Mexico had little effect, but the seeds of trouble were planted when Congress adopted in 1846 a tariff for revenue only. Industrial plants were small in that era and machinery was crude; and the makers of iron, steel, textiles and other goods could not withstand the competition of the great and more advanced factories in Europe, without genuine protection. A large excess of imports soon appeared in our foreign trade and gold was drawn from the banks and sent abroad to pay for the goods.

The activity of business had once more overburdened the banks with loans and a loss of specie made trouble. Matters were in shape for a reaction.

In 1847, a great crisis arose in Europe, due to inflated credits, fraudulent stock companies and a frenzy of speculation. The reaction extended to the United States, invaded every part of the country and caused a halt and severe liquidation.

## 1851—END OF THE DEPRESSION

THE discovery of gold in California by Marshall brought about improved sentiment, although not at once. Thousands of Americans went wild over the prospect of sudden fortunes, however, and rushed to the Pacific coast overland, across the isthmus and around Cape Horn. Merchants and ships followed to supply their needs. When it became evident finally that the mines were likely to supply fresh capital for business operations, railroad building was resumed. In a few years, California was actually sending \$40,000,000 of gold per annum to the East. Whatever there was of doubt in the business situation was finally cleared away by a small panic in stocks, Aug. 13, 1851, as a result of a break in Erie from \$90 a share to \$68%. The smash was soon succeeded by a genuine revival.

## CRISIS OF 1857

A BOOM in business broke out soon after 1851, in spite of the injury to manufactures by the low tariff. Trade had grown with rapid strides to keep pace with settlement of the West and the Pacific coast. Shipping had reaped a rich harvest in the traffic of the Atlantic during the Crimean War, 1854/5, and the finest clippers in the world had been built for the trade to California and often paid for themselves in one trip. Owners of merchantmen added enormously to their fleets in that prosperous period; and ship carpenters were among the best paid of American workmen.

The construction of new railroads was in full swing between all important cities and the miles of new line put into operation annually had grown from less than 1,700 in 1850 to 3,642 miles in 1856. What this meant for the iron and steel industry hardly needs explanation.

Good times were universal. Iron, dry goods and all other commodities brought high prices. Wealth was advancing. European investors looked with favor on American securities. Every one was making money.

Wall Street discounted the good times in its chronic manner. An immense issue of new securities was finding its way into the stock exchanges and an active speculation in them was being conducted. Rich men were already engaged in the pursuit of greater wealth by watering stocks; and an increase of the capital of Erie from \$3,000,000 to \$38,000,000 was only one of the financial incidents of the period.

With reference to securities, the top of the boom was touched in December, 1856, some time before the actual crisis. Dec. 5th, the rise in prices caused the failure of Jacob Little, who had been short of Erie more than 100,000 shares. The reaction which ensued might have ended in such a moderate downward turn as is usual in a bull market, were it not for changes in the credit situation, which the excited speculation of 1856 had done much to promote.

Foreign trade had run steadily against the United States on account of the low tariff, and the yet lower tariff, then under discussion and finally enacted March 3, 1857, promised an aggravation of the trouble. Investment of European money here, California gold and the earnings of the merchant marine did not offset the demands of

foreign merchants upon our specie supply; and net exports of gold ran all the way from \$23,015,500 in 1853 to \$58,578,000 in the fiscal year of 1857.

Scarcity of cash soon made itself manifest, and when cash holdings had fallen to about 8½ per cent of the loans, it was apparent that no more money could be placed at the command either of the mercantile community or of speculators.

There was a trifling improvement in stocks in January, 1857, but the high prices for railroad securities, iron and goods of 1856 were not repeated until long afterward.

In January, 1857, liquidation set in; and falling prices were recorded for months. The tension in the financial world soon reached the snapping point. Aug. 24, 1857, the Ohio Life Insurance & Trust Company succumbed under the strain of reckless loans, official wrong doing and the stringency in money; and the crisis had arrived. Wall Street should not have been, but was, taken by surprise; and that busy center has seldom witnessed scenes of greater excitement than prevailed during the panic. In New York, loans had been in excess of deposits for some time, and while that was not an unfamiliar phenomenon in those days of moderate banking resources, and while a reaction in stocks was inevitable from all the circumstances of the case, the crash would not have been so disastrous had not a multitude of intelligent men fallen into a senseless panic and by their precipitate action destroyed their own fortunes and those of others. A panic is always unreasoning, however, and there is this to be said in justification of the fright, which swept the business world, that the banks had reached the limit of their ability to finance merchants and speculators; and the smash was promoted by a coterie of speculators, who had

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foreseen trouble and gone short of stocks and whose profits were dependent upon exciting a frenzy of alarm. From the first of the year to October, good stocks dropped between \$40 and \$60 a share. Scores of business men were ruined by the reaction. There were runs on the banks and in October, a number of them suspended. Erie, Michigan Southern and Illinois Central went into the hands of receivers. Bank clearings in New York in 1857 were only about half of the total of the year before.

The depression in business circles lasted practically for four years. Stocks appreciated in value, as above noted, in the early part of 1857, but after that, there was liquidation until 1858.

### 1861—END OF THE REACTION

DULLNESS reigned in many important fields of enterprise after the terrible panic of 1857. All new work was stopped and falling prices and stagnation were experienced throughout the country. Iron fell more than \$9 a ton from 1856 to 1861. Railroad building had received a staggering blow and fell from 3,642 miles of new line in 1856 to 651 miles in 1861. There was less demand for the output of the textile mills and thousands of men were out of work. Some small improvement appeared in 1860 but it was short lived.

In consequence of political troubles, a turn for the worse occurred in May, 1860. Threats of secession were being made by fiery orators in the South, if a Republican President were elected in the Fall; and this brought about a serious state of affairs. Several years of frugality and careful management had led to more healthy conditions, when the difficulty of making collections in the

South impaired the credit of many Northern merchants. President Lincoln was elected in November, 1860, and the situation then became acute. Stocks fell from \$7 to \$16 a share in a month's time. For the first time in its history, the New York Clearing House was forced to issue loan certificates, Nov. 23, 1860, to the amount of \$7,375,000, to carry the banks through the monetary stringency.

After a rally in December from the low prices of 1860, stocks dropped until April, 1861, when there was a sudden semi-panic, caused by the firing on Fort Sumter and the outbreak of hostilities. From the low prices, then made, stocks rallied for three years.

A powerful influence in favor of the improvement which then set in was the Morrill protective tariff, enacted March 2, 1861. Another was the new source of wealth, discovered in Pennsylvania, in the form of petroleum.

A second issue of loan certificates, amounting to \$22,585,000, was made by the New York Clearing House, beginning September 19, 1861, and this carried the banks through to better times, in spite of the general suspension of specie payments. Dec. 28, 1861.

#### CRISIS OF 1864

EVENTS moved swiftly during the Civil War. The formation of a large army in the North and its march to the South created a demand for supplies and breadstuffs; and the shipment of troops and munitions to different parts of the country added to railroad earnings.

A strong impulse had been given to manufactures by the Morrill tariff and the requirements of the army; and

hundreds of tons of pig iron, which had been stacked in the yards of the furnaces, for years, were bought by the mills at prices which dazzled the mind and enriched hundreds of men. Pig iron rose \$55 and \$60 a ton from 1861 to the Summer of 1864. All other commodities sold at high prices. In 1862, a great bull market in stocks began and prices rose excitedly, with scarcely a halt the whole year.

An effective cause in this wild whirl upward in prices was the issue of \$431,000,000 of greenbacks by the Government and the expansion of paper money circulation from \$207,000,000 in 1860 to \$833,719,000 in 1864.

Trade was extremely active. Wages were high, as might have been expected after a legion of young men had left the farms and workshops and gone away to the front. Every one who had not shouldered a rifle to fight the battles of his country made money, as never before in his life. In Wall Street, in manufactures, army contracts and trade, fortunes rolled in upon thousands of men: and money was spent with open handed prodigality.

Speculation required the use of such unheard of sums of cash, that the banks in New York were forced, for the third time, to resort through the Clearing House to loan certificates, \$11,471,000 being issued, dating from November 6, 1863, to relieve the strain on credit.

In the Spring and Summer of 1864, stocks were bulled to extraordinary prices. Top of the boom was actually reached in April, although a few securities went higher in June. Everything on the list was from \$70 to \$80 a share higher than in April, 1861, and the speculative favorites from \$100 to \$189 a share. Delaware & Hudson had felt the enormous demand for anthracite coal and was

manipulated to \$254 a share. Erie for the same reason rose to \$126 and Reading to \$165. Those prices have never been seen since in the more than forty years which have now elapsed. In June, Harlem was cornered by Commodore Vanderbilt and went to \$285 (a price, singularly enough, the same to which gold was forced in July, the highest quotation for the metal). Harlem went off the list of the stock exchange for several years and did not sell at \$285 again until 1896. Michigan Central touched \$157 and ever thereafter until 1891 ranged below that figure. In looking over the record of 1864, one finds a number of other stocks, which sold at prices not again equalled for a whole business generation. As for the market, as a whole, taking the average of the broad trading stocks, it has required forty years to reach once more the high level of 1864.

The speculative revel went madly on, even while the money market was working into a dangerous position and when every cautionary signal of finance pointed to a certain, early and frightful collapse. Grim and relentless war was raging in all the border States, pain and sorrow had entered thousands of homes, the public debt was running up into the billions. But swept away by the wild enthusiasm of the times, speculators and business men believed the boom would last forever.

Paper money inflation had been steadily expelling gold from the United States; and net exports of the precious metal during the fiscal year of 1864 were \$89,484,800, the heaviest in recollection. Foreign trade was running strongly in favor of Europe; and an adverse balance of \$157,600,000 was rolled up against us in 1864, which also broke all previous records. Money worked close again, as



was natural; and a fourth issue of loan certificates was resorted to, in New York, dating from March 7, 1864, amounting to \$17,728,000.

When the break in Wall Street finally came, the immediate cause was a reaction in Fort Wayne stock. That security had been bulled in the interest of Anthony W. Morse from \$82½ in January to \$152¾ in April, and, after the failure of Mr. Morse, April 18th, it fell suddenly, declining to \$47½ by May. The pools were taken aback by this performance; and while they did not relax their efforts on the bull side for a month or two, yet manipulation was no longer effectual, and a bear market set in during June, which lasted for several years. More than one cause contributed to the result, but the excessive loans at the New York banks, and the high premium on gold, were two of the most important. The scarcity and high price of gold, then of almost more consequence than high rates of interest on money, combined with other adverse influences, caused a semi-panic in the Fall, and stocks fell violently until well along in October. After a moderate rally, they then went lower; and by the Spring of 1865, leading stocks had declined from about \$40 to \$80 a share. Delaware & Hudson had fallen \$121.

Heavy losses were incurred by hundreds of speculators; and the reaction extended to the country at large.

#### 1867—LOW POINT OF THE DEPRESSION

AFTER the passionate excitement and reckless speculation of the Civil War period, calm ensued for two or three years. The country had been exhausted by the long and

cruel conflict; and the financial debauch was over for the moment. President Lincoln had been assassinated; and a million of men had gone back from the armies in the field to their old homes or to new ones in the West. Iron and other manufactures had been depressed by a sudden ending of the demand for war ships, arms, munitions and supplies. Contraction of the paper circulation was in progress, the volume being reduced from \$983,300,000 in 1865 to \$827,000,000 in 1868. A brief period of rest and adjustment to new conditions was imperative.

Stocks rallied to some extent in 1865, as usual after an abrupt decline, but underlying conditions were not favorable to an immediate resumption of the bull market. Imports were heavy; and in the fiscal year of 1866, gold went abroad in the amount of \$63,001,000, next to the most serious outward movement on record. Stocks fell off again in the Spring of 1866. May 11th, 1866, Overend, Gurney & Co., of London, failed, precipitating a sudden panic at that center and a depression, which had no little sympathetic effect here. Writers refer to this chapter of finance as the Crisis of 1866. Practically, it marked the turning point here. After a rally, and one more reaction in the Spring of 1867, the trouble was ended. Twenty selected stocks had fallen an average of \$58 a share from the high prices of 1864, and individual stocks had declined from about \$40 to \$130 a share. The collapse in England caused two thirds of the speculative stock companies there to go out of business.

In 1867, large fortunes were brought to the support of stocks and general business and better times prevailed for several years, although the banks were not yet in a position to finance a sustained bull market in stocks.

Every burst of business activity and the requirements of the railroad companies called for every dollar the banks could loan and the burden was borne with difficulty.

## CRISIS OF 1873

IMPROVEMENT, once begun, went forward rapidly. Railroad building, which had fallen to 738 miles of new line in 1864, grew to 7,379 miles in 1871. The protective tariff was working out good results; and while stimulating production, it had given the country the advantage of moderate prices for iron and other goods. A genuine boom soon manifested itself, especially in iron and steel. Mills and shops of every description were rushed with orders. No workman was denied who sought a market for his services. New lands were being settled, partly by veterans of the war. A number of fortunate crop years added to the wealth of the States. In the fiscal year of 1873, exports had passed \$522,000,000, which was more than thrice the amount of the last year of the Civil War and the greatest business the country had ever done up to that time.

The rebound in stocks from the low levels of 1866 and 1867 was vigorous and ran on unchecked until the Summer of 1869. A few stocks went higher in 1871 and some others in 1872. The real culmination of the bull market was in 1869, when high priced railroad shares were from about \$30 to about \$100 higher than during the depression. The coal shares were exceptions; they hung heavy and some of them were actually lower. The period from 1869 to 1872 was one of distribution. General prosperity

was unchecked until 1873 but stock speculation drooped. A variety of untoward events occurred.

Black Friday panic, September 24, 1869, caused by a corner in gold, sent stocks tumbling, led by a decline in gold from \$162½ to \$133. Clearings at the Gold Exchange Bank were so entangled and confused that the bank went into the hands of a receiver and its doors were closed for several days. Many failures occurred in Wall Street and hundreds of business firms were crippled or obliged to wind up their affairs.

The Chicago fire, October 9, 1871, and the Boston fire, Nov. 11, 1872, each caused a heavy waste of invested capital and a break in stocks.

In spite of all disasters, the stock market was measurably strong until 1872. Not only were powerful cliques energetic in sustaining prices until they could sell their holdings; but extra dividends were voted by railroads, the most unheard of watering of stocks was announced from time to time, and a few important consolidations were effected, like that of New York Central with Hudson River, all contributing to awaken hopes of higher prices yet to come. Rivalry in the buying of shares for control added to the excitement. A number of desperate battles were fought in Wall Street between rival factions. Corners were engineered, one after another; and there were three on one day, September 17, 1872, yet remembered as the "day of three corners."

While the trend of stocks was downward, business remained in a healthy condition. Business men were doing extremely well, crops were good, and pig iron production in 1873 rose to 2,560,900 tons, so far the high water mark in that industry in America, while the price had risen over \$20 a ton by the Fall of 1872.

Various influences had come into play, meanwhile, to weaken the credit situation. Reckless overtrading in Wall Street invariably adds to the weight of other forces in this direction. In spite of enormous grain exports, the United States had been buying foreign goods in even greater quantity; and gold had been going to Europe at the rate of from \$21,000,000 to \$63,000,000 a year since 1867. Bank reserves were low, and scarcity of cash caused a money flurry in September, 1872. Loans were made at  $\frac{5}{8}$  per cent a day and  $2\frac{1}{2}$  per cent was paid for carrying Erie stock. Later in the year, the market was unsettled by a break in Chicago & North Western. The Woodward party had bought and cornered that stock, driving the price from  $\$68\frac{1}{2}$  in October to \$230 in November, but the corner failed almost at the moment of success and the stock broke to  $\$81\frac{1}{2}$  in December. A semi-panic ensued, with many failures. For a short time, the banks stopped the issue of weekly statements of their condition.

Early in 1873, money worked close again. Call loans could not at times be made for less than 7 per cent, with  $\frac{3}{4}$  per cent a day commission added. Bankers charged  $\frac{3}{4}$  to 1 per cent a day for carrying stocks. Time loans went to 12 per cent. The crisis was at hand, promoted by the overbuilding of railroads.

The public, already nervous, was startled on April 26, 1873, by the failure of the Atlantic Bank; and then began a financial and commercial panic, which was due entirely to the excesses of the previous five years. The echoes and consequences of a panic in Vienna, May 9th, growing out of reckless speculation in doubtful securities, made matters worse here. Frantic selling of stocks began at the New York Stock Exchange and prices crumbled away, week after week, without more than one brief pause in the Fall.

September 8, 1873, the New York Warehouse Company succumbed. On the 17th, the New York Midland became bankrupt and Jay Cooke & Co. failed on the 18th. This last calamity capped the climax. Fright and excitement swept the whole country. In Wall Street, pandemonium reigned. So terrible was the panic, that the Stock Exchange took the perfectly unprecedented action of closing its doors on the 20th, not to reopen them until the 30th. Time loans were 15 to 24 per cent in October and call money was 7 per cent, with  $\frac{1}{4}$  per cent a day added. For the fifth time, the New York Clearing House issued loan certificates, dating from September 22, 1873, in the amount of \$26,565,000. With a view to relieve the tension to some extent, the United States Treasury reissued about \$26,000,000 of greenbacks, there being slender warrant in the law for this action.

The smash in stock prices ended in November and a great rally followed. But the financial storm had wrecked many fortunes and thrown a number of banks and hundreds of business men into bankruptcy, as well as the Northern Pacific and the New York, Chicago & St. Louis railroads. It is said that seventy-nine members of the New York Stock Exchange failed during the panic. In the country at large, failures among business men grew more numerous, every year thereafter, until 1878, inclusive.

The Credit Mobilier investigation intensified the general uncertainty.

#### 1877—END OF THE DEPRESSION

THE reaction in business lasted until the latter part of 1876 and in some lines until the Summer of 1877. Pig

iron making fell off from 2,560,900 tons in 1873 to 1,868,900 tons in 1876; and there was no important recuperation in price until 1878, when there had been a fall of about \$40 a ton from the high prices of 1872. New miles of railroad constructed dropped from 7,379 in 1871 to 1,711 miles in 1875. In all other vocations, dullness, lower prices and smaller profits were reported.

January 14, 1875, President Grant signed the bill, pledging the Government to resume specie payments, on the 1st of January, 1879, and while this was a reassuring incident, its good effects were not felt immediately.

Men of large means were greatly disturbed during this period by the so-called granger laws of several Western States, which aimed a hard blow at the railroads in the interest of farmers and sought to regulate and reduce freight rates. Partly in consequence of these laws and also as a sequence of the hard times and loss of freights, all agreements as to rates came to an end between railroad and coal companies; and open wars broke out between several important systems. Slackening of traffic had already impaired earnings and the damaging competition of 1875 and 1876 cut them down yet more. Commodore Vanderbilt died, January 4, 1877, and a trunk line agreement which he had brought about a month or two before was abandoned. Loss of earnings sent Central of New Jersey into the hands of a receiver in February; and Reading was obliged to apply to creditors for concessions.

The trend of the times was so unmistakably downward in Wall Street in this period, that a strong bear party came into existence, and its untiring attacks caused prices (after a rebound from the bottom in 1873) to reach a lower level in the Spring of 1877, than for the previous

twenty years. The last drive in the month of June ended the reaction in the stock market. Taking the whole body of active stocks, all the gain since 1861 had been wiped out; the average was lower than then; 20 selected stocks had declined \$76 a share since 1869 and individual stocks were down from \$14 to \$116 a share, the high priced ones the most. A change in outside conditions was then ushered in. Call money was remarkably 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.

#### CRISIS OF 1884

BETTER times trod upon the heels of 1877. Confidence returned slowly, indeed, 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 excess of American exports was only one of the features of this golden period in our affairs, which broke all records. During four years, ending June 30, 1881, foreign trade yielded an average balance of more than \$230,000,000 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 2,665 in 1878 to 11,569



in 1882. The transportation of materials 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 4,623,300, or nearly three times the record of 1876. 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. 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 flurries 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. In 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 flecked 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 consolidations 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 were not allowed to pass without a few unfortunate incidents, however, among them being a receivership for Reading, May 24, 1880, and a strong speculative shake out in stocks in that month.

Activity in Wall Street and general business circles was exhibited by the circumstance, that, throughout the whole of 1880, reserves were extremely low in the New York banks. But gold began to flow in from Europe and in the fiscal year of 1881, all records were broken by a net importation of \$97,000,000 of that coin.

The boom in stocks culminated in May and June, 1881. Shares had then risen, in some cases \$40 and in others as high as \$120, averaging about \$60, from the low prices of 1877. After the shooting of President Garfield, July 2, 1881, stocks did not rally back to the high level of the Spring in more than a few exceptional instances. For particular reasons, a few did go higher in 1882.

A direct cause of the halt was undoubtedly the enormous issue of new stocks and bonds, put forth as a consequence of the marvelous increase in miles of railroad

line in operation and the union of old companies. The market was overweighted with those securities. All were pressing for sale; and some of them held out no hope of an income to the owners for years ahead. Another source of disturbance was a partial failure of the wheat and corn crops in 1881. Rate wars again blasted the hope of larger earnings in the latter half of 1881; and freight was carried by the trunk lines from the West to the seaboard at rates which barely paid the cost of transportation. Exports of American produce began to fall off. Gold not only ceased to come into the country, but on the other hand went out.

Every effort was made to neutralize the effect of less favorable conditions; and leading men, like Mr. Vanderbilt and Jay Gould managed to lift prices somewhat in 1882. Large fortunes were brought to the support of the market. March 13, 1882, Mr. Gould made his famous exhibit of securities to a few friends, spreading out before them about \$50,000,000 of stocks and offering to show them \$30,000,000 of bonds. No efforts, however spectacular, sufficed to stay the downward trend in Wall Street. In the Fall of 1882, money ran up to 20 and 25 per cent, and once to 30 per cent, for call loans.

By this time, the public had become seriously alarmed. Thousands of men opened their eyes to the fact that they were loaded with stocks and bonds, which could not be sold at a profit and were not worth keeping as investments. Liquidation set in; and this selling imposed a burden upon the market too heavy to be sustained. A heavy shrinkage in values took place; and in the Fall of 1882, a number of stocks reached the lowest prices known for more than a year.

Confidence was greatly unsettled by this decline; and

although the earnings of some of the railroads were good yet nothing sufficed to stay the liquidation.

New and troublesome factors came into play in 1883. A revised tariff law of March 3, 1883, deranged the iron and textile trades and general business slackened. Prices of commodities fell, iron leading the way. Another of the disturbing influences of the time was the fact that some of the new railroads were exact parallels and competitors of the older systems.

The crisis arrived in 1884. In January of that year, Henry Villard, and in April, James R. Keene failed. In May, in quick succession, came the suspensions of the Marine Bank, Grant & Ward, and the Metropolitan Bank, coupled with startling revelations of fraud, which stunned the public mind. Brokers and traders were frantic; and a panic took place, memorable not only for its violence but because the prestige of Gen. U. S. Grant, the idol of the nation, was involved in the ruin of Grant & Ward. First class stocks were thrown overboard and sacrificed, equally with the weak ones, and prices declined from \$17 to \$54 below the levels at which they had sold a few months before. In the midst of the excitement, May 11, 1884, the New York Clearing House lent its strong support to the financial community by a sixth issue of \$24,915,000 of loan certificates.

During the latter part of 1884, the trunk line railroads again went to war with each other and cut rates heavily, making matters worse.

It is to be noted that the panic was the direct outgrowth of three years of declining prices. Loss of confidence in various great magnates of finance had slowly driven thousands of men out of the stock markets. Their buying no longer lent support.

## 1886—END OF THE REACTION

BOTTOM was touched in the stock market in June, 1884. In three years, many active stocks had fallen from \$30 to \$75 a share and Union Pacific was down \$103. A few stocks went lower in the early part of 1885 but the market at large was then on the road to recovery. Traders were discouraged, however, and sales on the New York Stock Exchange ebbed from more than 117,000,000 shares in 1881 to 96,000,000 in 1884 and 93,000,000 in 1885. Nevertheless, in 1884, the foundations were laid for a bull market, lasting until 1890.

The set back in business was of short duration. It ended in 1886. So brief and trivial was the revulsion, that it might almost be said there was none.

Liquidation brought its usual panacea for the woes of Wall Street and the financial world, in the form of easy money. Call loans fluctuated between 1 and 3 per cent, as a rule, during the whole of 1884 and 1885.

In stocks, there was a good rally in August, 1884, and then while business men were taking breath and examining the grounds for taking hold again, dullness and sagging prices prevailed for six months or more. Easy money and low rates of interest finally encouraged some tentative buying of stocks for a rise. In June, 1885, a mysterious buying of Vanderbilt stocks and West Shore bonds began to be noticed, which really foreshadowed the absorption of West Shore by the New York Central and the formation of a new pool among trunk line roads for maintenance of rates. A sharp advance in stocks took place, running on into November, and this initiated a

sustained rise, which did not end until the disastrous year of 1893.

Wm. H. Vanderbilt died December 8, 1885, but the effect on stocks was limited.

The progress of good times was interrupted briefly in 1886 by fierce strikes in New York, Chicago and elsewhere, accented by the bomb outrage in Chicago, May 4th. There was also a sharp reaction on account of agitation in favor of the proposed Inter-State Commerce Commission bill, when Congress met in December. Gold exports in 1886 were not a cheerful feature. But underlying conditions had grown better. Magnificent crops, fresh imports of gold, a revival of railroad construction, and new life in the iron and coal trades inspired the public finally with courage; and the bears in Wall Street became uncertain of their position.

#### CRISIS OF 1893

**IMPROVEMENT** in the times was aided by harmony among the railroads, defeat of successive bills in Congress aiming at a lower tariff, and the concerted work of bankers and financiers.

In 1887, there was added to the railroad systems of the country 12,876 miles of new line; and this record has ever since remained the high water mark of railroad building in the United States.

The bull market worked gradually upward after 1885. In 1887, a number of sensational movements in stocks enlivened Wall Street; and Aug. 11th of that year marked the finish of Henry S. Ives, who failed, to the delight of every one else in the financial community.

There were the inevitable set backs, peculiar to every

bull movement, no unfavorable circumstance being allowed to pass without an impetuous drive at stocks by men like James R. Keene, whose talents shone the brightest in a bear campaign. In 1888, St. Paul passed its dividend, and a sharp slump in prices resulted. January 10, 1889, J. P. Morgan finally effected the famous "gentlemen's agreement" between trunk line officials as to rates; and there was a good recovery in prices.

The bull market culminated with the Spring rise in 1890. A swarm of troubles then cropped up. A partial failure of the harvests and various corporate receiverships were among them. In July, Congress passed the act for monthly purchase of 4,500,000 ounces of silver and redemption of silver notes at the Treasury in gold. In the Fall, the Democrats swept the country. To leave nothing lacking, the Baring banking house in London suspended in November. Before this last disaster, heavy foreign selling of American securities had mysteriously broken out, due to a fear that the United States could not maintain the gold standard, to financial troubles in Buenos Ayres and to private knowledge in London of the Baring embarrassment. Gold was heavily exported, money grew scarce in New York, and the Clearing House was compelled to issue \$16,645,000 of loan certificates to sustain the banks.

November 15th, when the startling news of the Baring failure reached New York, a panic burst forth in Wall Street, the break in stocks being urged furiously by a bear party, having James R. Keene as its leader. The break was soon over and December saw prices mounting again rapidly. But the drop had cancelled more than half the rise since 1884. The life was gone from the bull movement. Some good stocks did not return to the high prices of 1890 for years afterward.

In spite of every set back, the bull party persisted until 1892 in an effort to put the market higher. Some stocks had not had their proper rise; and a number of them made their highest quotations in 1892. By the Spring of 1892, leading stocks had risen from \$12 to \$30, or \$50 to over \$100 a share (according as they were the low or the high priced favorites) from the level of 1884. But the two years of 1891 and 1892 were devoted entirely to distribution. Sagging prices were the rule; and after the moderate January rise of 1893, even the dullest mind was aware of the fact that the bull market had ended and that much lower prices were ahead.

The Crisis of 1893 was forecasted by nearly all the customary factors. The times had been good. Enactment of the McKinley protective tariff in 1890 had stimulated manufacturing. Every vocation flourished. Fortunes had been acquired; and money was being spent with reckless and even vulgar ostentation. Wealth had been added to by an enormous sale abroad of American produce; and exports had passed the billion dollar mark in 1892, for the first time in history. Then, the current of commerce changed. From an excess of exports of \$202,875,000 in 1892, the balance of trade dwindled, and in 1893, there was an excess of imports of nearly \$19,000,000. Mr. Cleveland was elected President in November, 1892, and Jay Gould died, December 2d. The silver purchase law had excited serious fears that the United States could not maintain gold payments; and, as the Democrats had come into power at Washington, every man of political experience fully expected a speedy downfall of the protective tariff. The situation was full of dangers. The banking situation was strained. Prudent men in Europe were selling their American securities. As payment for this



flood of foreign liquidation could be made only in gold (in view of the disappearance of a favorable balance in the foreign trade) there was shipped abroad in the fiscal year of 1893, net, \$87,506,000 of gold, a sum only once before exceeded and never since. The drain upon banking resources forced the calling of loans in December, 1892; and rates for temporary accommodations rose to 25 and 40 per cent. Conditions were ripe for a swift rending asunder of the speculative structure, which had been reared with so much labor since 1884.

The crash came, soon after the collapse of the McLeod deal in Reading, February 20, 1893, and the bankruptcy of the company. Reading fell \$22 a share within a week. In March, Mr. Cleveland was inaugurated and attacked monopolies in his address. The banks began to call loans again and interest ran up to 60 per cent. A genuine currency famine prevailed. The strain in financial circles was terrific. May 4th, National Cordage went into the hands of a receiver; and next day, S. V. White announced his inability to meet his obligations. Panic reigned in Wall Street and there has seldom been a more precipitate decline in stocks than ensued, lasting three months. Good stocks fell rapidly and bad ones more swiftly yet. The big men were out of stocks and did nothing to support the market. In June, an old time remedy was called into play; and the New York Clearing House made its eighth issue of loan certificates, a total of \$41,490,000. In other cities, the Clearing House banks took a similar course to relieve the tension. The stock market steadied itself in July and the worst was over so far as securities were concerned. The ruin and distress in the country at large were, however, indescribable. Failures were announced, day after day, in nearly every State, and

many banks went down. The trouble was world wide and great banks also failed in Italy and Australia.

The blight upon business is illustrated by the record of commercial failures, which numbered 10,344 in 1892 and 15,242 in 1893, liabilities in the first named year being \$114,000,000 and in 1893 over \$346,000,000. Scarce one active business man came through unscathed.

About one fourth of the railroad mileage of the United States went into the hands of receivers. Reading, Atchison, Erie, Union Pacific, Northern Pacific, and New York & New England were among the bankrupt roads.

One favorable outcome of 1893 was the repeal of the silver purchase law, at a special session of Congress, called by Mr. Cleveland for that purpose.

#### 1896—END OF THE DEPRESSION

THE years of 1894 and 1895 constituted a period of great gloom. The benefits of the repeal of the silver purchase law were nullified only too soon by agitation for demolishing the protection of the tariff to manufactures. The Wilson tariff, in fact, was enacted in August, 1894, and the friends of home industry were despondent. Sentiment was farther depressed in the Summer of 1894 by the strike at Pullman, Ills., and the crimes and outrages perpetrated by the unions and the march of Coxe's army of tramps to Washington. The iron and steel trades suffered a serious reaction; and times were hard everywhere. Railroad construction was at a low ebb, in consequence of previous reckless overbuilding; and a smaller mileage was added to the lines in operation, in each year, until, in 1896, the total of new construction was only 1,654 miles.

A deficit in Government revenues soon occurred and

therefrom sprang a fresh cause for alarm. The Treasury began to be apprehensive lest it should become necessary to encroach upon the \$100,000,000 gold reserve for ordinary expenses of the Government. By January, 1895, in spite of sales of bonds to replenish the gold reserve, the Treasury stock of the coin had fallen to \$44,000,000. No sooner would the gold reserve be recruited to a proper point than withdrawals would commence again, the coin being taken out in exchange for greenbacks. The gold standard was once more in danger. In January, 1895, a virtual run on the Treasury set in; and gold went out at the rate of \$3,000,000 a day and \$30,000,000 was taken out not required for export. Hoarding of the metal by banks and private citizens began. This was so serious an evil that radical measures had to be taken; and in February, a contract was entered into with the Morgan-Belmont syndicate of bankers in New York, who agreed to accept the bonds of the Government, stop the export and hoarding of gold, and maintain the reserve intact. The action of the syndicate was as good as its word and its notable achievement did much to reassure business men.

A distinct revival of the iron trade was experienced in 1895, although dullness prevailed in most other vocations. Stocks made a start on the highway to recovery, but public confidence had not fully returned. The market was ripe for a reaction; and, at this juncture, December 17, 1895, President Cleveland sent to Congress his famous message on Venezuelan affairs, which seemed to contain a threat of war with Great Britain under certain contingencies. In the uncertain state of feeling, this message proved a shock to the public mind. A genuine, even if short lived, panic broke out in Wall Street, and there was a more than fifteen-point slump in stocks.

In 1896, the banking situation was bad. The net export of gold in the fiscal year rose to \$78,884,800, a figure exceeded only twice before and happily never since. Cash holdings of the banks were low.

In July, 1896, the historic Bryan scare threw Wall Street into a fresh panic. Every one sold stocks and in August prices touched the lowest level for ten years, going below that of 1893 and 1894. The decline from 1892 ranged from \$20 to more than \$90 in most stocks. Union Pacific sold for \$4 a share; Northern Pacific for \$3.50; Reading for \$6; Atchison for \$8.25, and so on. Sentiment was extremely depressed that Summer. The Baltimore & Ohio was in the hands of receivers, the iron trade was dull, other industries were suffering, and the free silver mania was raging throughout the country and seemed about to sweep all before it.

August was however the turning point. Bumper harvests, wheat exports, a cessation in the outflow of gold, some imports of the metal, and finally the triumphant election of McKinley as President in November, put an end to depression and revived hope throughout the country. Everybody scrambled for stocks, manufacturers began to prepare for a larger business and a bull market was quietly set on foot, which, after a little, gained headway and which ran on for six years.

#### CRISIS OF 1903

The better times did not gain momentum until after July 24, 1897, when the Dingley protective tariff received the signature of President McKinley. Swiftly a boom broke out in stocks. The iron and dry goods trades

revived; and all classes of mills and shops were soon running on full time in order to satisfy buyers, who sent in an avalanche of orders. Bank reserves increased enormously. Call money loaned at nominal rates of interest in 1897 and did not harden greatly for several years. The clouds of gloom fled before the bracing winds of prosperity in every part of the United States and the betterment gained headway as time wore on. In cities, the erection of new buildings attained marvellous proportions; and the increasing use of iron and steel in these structures spurred the iron trade. On the lines of transportation, the rails hummed with the passing of throngs of heavily laden trains and railroad earnings grew steadily larger. Good times blessed the whole country. Every business man was doing well. Labor enjoyed ample employment at good wages. New ventures of all kinds were launched by the score. All the phenomena of profitable times were visible on every side. Personal expenditures were lavish in the extreme and men dressed their families with a magnificence never before witnessed in this republican country.

During this fortunate period of six or seven years, no influence seemed to be lacking to promote the welfare of our people. Community of interest, an old principle under a new name, developed among the railroads. Rate wars were no more. Gold exports were moderate and excited no concern. American breadstuffs and other products found a ready and ever growing market abroad; and by 1901, excess of exports had reached the astounding total of \$664,592,000.

Meanwhile, a great bull market was in progress at the stock exchanges. With the inevitable reactions, prices mounted steadily; and brokers reaped a golden harvest

of commissions in the execution of orders to buy from every State in the Union. Never before had been witnessed such interest on the part of the general public. Transactions were in enormous volume, from time to time; and on one day in 1901, sales at the New York Stock Exchange reached 3,000,000 shares. Clerks were forced to work nights and holidays to make out Clearing House sheets and post the books, in order not to be swamped with the stream of business. Fortunes were made by every trader. It was enough to buy "any old thing" on any reaction to be sure of large profits on the next rally. Petty traders and big operators divided among them the rich profits which were made every week.

It is not to be supposed for a moment, that the tranquil progress of good times and the boom in stocks was not interrupted, now and then, by sinister incidents. No such period has been devoid of them. Good times were never more sharply tested than during the last half of the cycle under review.

Frauds in New York in 1897 and the collapse of the E. S. Dean Co. in the latter part of 1897 set back prices for a time and called out from Thomas W. Lawson of Boston, who was already striving for publicity, a two-page article in a New York daily newspaper, headed the Most Gigantic Conspiracy since the Credit Mobilier."

The trans-Missouri decision, March 22, 1897, chilled enthusiasm for several months.

War with Spain in 1898 was responsible for a sharp reaction.

May 12, 1899, Roswell P. Flower died in the midst of a boom in certain stocks, with which his house had been identified, and the collapse of those specialties administered another set back to the market.

In December, 1899, British defeats in South Africa startled the English public; and a sudden scare developed, heightened here by failure of the New York Produce Exchange Trust Co. and Henry Allen & Co. During this panic, call money was quoted at 186 per cent.

In April, 1900, John W. Gates caused the mills of the American Steel & Wire Co. to be closed, on account of a falling off in orders for their products and there was another momentary chilling of hopeful feeling.

The corner in Northern Pacific in May, 1901, and the attendant panic of the 9th are memorable for the swift and remarkable break at the Stock Exchange and the sudden recovery. Speculative favorites dropped \$25 to \$80 a share from the high prices made a few days previously. In a month's time, the loss had practically been recovered.

A crop scare in 1901, several suspensions in Wall Street and Canada, the shooting of President McKinley, and the collapse of various wild cat securities, all aroused public concern and contributed to render the market wild and irregular

So great was the momentum of the good times, however, that the current of prosperity ran on undismayed until the Fall of 1902. Wealth accumulated in this era as never before. Hundreds of men obscure until the boom in stocks had made them rich took their place among old time leaders of finance, with possessions such as they had not dreamed of twenty years before.

At the very height of the good times, forces came into play in the old, old way, which foreshadowed a coming crisis.

Reckless speculation had forced stocks to a dangerous pinnacle of prices, much beyond their investment worth, supplying an exact parallel to the year of 1864. A multi-

tude of gigantic corporations had been created, most of them a union of smaller ones, with inflated capitalizations, the common stocks of many being given away as a bonus. Over \$2,000,000,000 of railroad securities alone had been issued in addition to the amount afloat. Banks, pools and syndicates were loaded with a mass of "undigested securities" of which so much was said in the newspapers of the day. "Indigestible securities" they were called by James J. Hill, and that was their character. They could not be sold at a profit and all were seeking a market in vain.

Banking capital had been overtaxed by the requirements of legitimate business and the pools in Wall Street strained the resources of every financial institution almost to the breaking point. In New York, five brokerage houses alone were borrowers of more than \$100,000,000 of money. The pools began to find themselves in a dangerous position.

The top of the bull market came in August and September, 1902. Stocks were from \$25 to about \$170 higher, than in 1896 and the main body of shares was near to the highest level they had ever attained in the history of the country. Desperate efforts were made to carry prices farther, but the task was too great. The public took alarm and would not buy. When call loans rose to 25 and 35 per cent in October, the end had come. The United States Treasury was appealed to for relief and something was done in the way of anticipating interest and buying bonds. While stocks reacted in the latter part of 1902, no serious trouble developed until after the January rise in 1903, although liquidation was going on steadily.

The banking situation remained bad all through 1903,



loans being in excess of deposits every month except the first two. Interest rates were high. Importing merchants bought enormously abroad and imports passed the billion dollar mark for the first time in history, the balance of trade in favor of the United States being reduced to \$394,422,000. Gold exports were avoided only by the concerted action of leading banks.

James J. Hill startled the public at this juncture by declaring in a speech that the "crest of the wave of prosperity" had passed. A conviction that this was true gradually forced itself into an incredulous public mind. Railroads were seen to be economizing in their purchase of rails and equipment. Reaction set in, in the iron and other trades. In April, 1903, a unanimous decision was rendered by the United States Circuit Court of Appeals that the Northern Securities merger was illegal. This decision, which had been feared for several months by financiers, unsettled confidence by threatening that the harmony in the railroad world would be broken. Banks, pools and syndicates began immediately to unload some of the securities they were carrying and loans were freely called. Liquidation was stimulated by a formidable bear party, which included some of the most daring and keenest minds in Wall Street. By June, the "rich man's panic" was in full swing. Stocks fell with hardly a halt until September, 1903, when with a final smash amid great excitement, the reaction terminated, having run its course in one year's time. The decline ranged from \$20 to \$75 or more a share. Fortunes shrank heavily during the twelve months and many business men and speculators went to the wall.

In business circles, the reaction lasted until the Summer

1903

of 1904. Enforced closing of many mills and shops was reported. Retrenchment was the order of the day. Thousands of workmen were discharged from the service of railroads and industries and nearly as many clerks from offices.

A new era of prosperity was ushered in during 1904. Liquidation of speculative accounts and the inaction in trade had produced a striking result in the banking situation in New York. Surplus deposits rose from \$40,000,000 below zero in November, 1903, to a surplus of \$111,000,000 in August, 1904, and interest rates were forced down by the plethora of funds to 1 and 2 per cent for call loans and  $2\frac{1}{2}$  to  $3\frac{1}{2}$  for time money. The great abundance of available cash led, as always, to the buying of stocks for the bull market of 1905-6.

In confirmation of the cycle theory, allusion may be made to the assertion of a financial writer of repute in New York City, a few years ago, that "an operator, to have been supremely right, would have changed his position on the market only eight times in forty years; the turning points have been 1861, 1867, 1872, 1877, 1881, 1885, 1892 and 1896." It is singular that 1864 should have been omitted from this summary; but the remark agrees in substance with the ten year cycle theory.

It will now be useful to summarize, more carefully, the features in which all these crises and periods of start toward recovery agree, even at the risk of some repetition.

The recital on the foregoing pages calls attention, first of all, to the ten and twenty year periods. In a less striking way, it points to the four or five year periods.

Every crisis is preceded by money stringency, growing out of the very prosperity which prevails. In good times,

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PROSPERITY AND DEPRESSION 101

every active man, whose business is capable of extension, applies to the banks for a loan of money, wherewith to carry on his operations. He expects to repay when the goods he is producing or the lands and articles he has bought are marketed. But, meanwhile, this force acting in all parts of the country gradually brings into action the funds which the banks have accumulated. The volume of surplus deposits begins to decline. The good times have been seen to be favorable to new enterprises, and these are set on foot in every direction. New corporations are organized whose united capital will aggregate millions, and even billions. Their securities are placed upon the market for sale. Pools and syndicates are formed to carry the securities and market them, and, to secure the end in view, the securities are made active at the stock exchanges and a lively speculation is begun in them. Of course, new securities are created in order to be sold; and the "big men" look forward to a time when they can transfer the whole load to the shoulders of the public. Syndicates and pools must have money, and their borrowings add to the burdens of the banks. Finally, interest rates rise, owing to the growing scarcity of available supplies of capital. Meanwhile, business is booming and every one is making money. Labor is in demand and wages rise. Strikes are set on foot, here and there, to hasten the rise in wages. The prices of commodities rise along with those of stocks. Carried away by the optimistic spirit of the times, it is unconsciously held that prosperity will last forever and great extravagance of personal expenditure is seen on every side. These features have all preceded every crisis in American business affairs.

At this point, it requires only a serious shock to public confidence to give a grave set-back to prosperity or actu-

ally to overturn the whole fabric. Foreign trade may begin to run against the United States, depleting money supplies at the very time when they are most needed. Some rude exposure of recklessness or fraud on the part of trusted institutions, the bankruptcy of a railroad or failure of an influential bank or operator in stocks, the outbreak of war, a drouth in the West, or some one of the numberless other calamities which may overtake the financial world, may bring about the crash. If the banking situation is sound, the country will withstand a good many shocks with equanimity; but if credit is strained, and especially if the big men have sold their surplus stocks, the crisis is inevitable.

Conversely, a period of severe liquidation in stocks and business enterprises and a large accumulation of idle funds in the banks, with a fall in interest rates to a minimum, has always preceded a turn for the better, both in stocks and the business world. Economy in all expenses, corporate and private, a fall in wages and prices, and a thorough weeding out of all weak features in the financial and speculative situation, attend the end of a period of depression.

It is to be noted, as a distinct and logical phenomenon, that the decline in stocks antedates the actual turn in business, and sometimes brings about the crisis. The top of a boom in stocks occurs at least one or two, sometimes three, years before the actual crisis.

On the other hand, recovery in stocks sets in before improvement is at all marked in trade circles.

Just as stocks are extremely apt to be bulled far above investment worth in a great rising market, so they tend to go much below it in a prolonged reaction.

Both at the top and at the bottom of the great movements in stocks, which accompany the cycles in trade, the market turns and winds for weeks and even months without going materially higher in the one case or lower in the other, before a change of trend becomes noticeable.

A circumstance of momentous interest is the fact, that the price of good securities has steadily moved higher, on the average, since 1877, in spite of all the trials to which they have been subjected by panics and reaction. It is true that they decline in every serious crisis; but, without a single exception in the last thirty years, the average has not fallen as low as in the last preceding period of depression, whereas they have tended so far in the present period of prosperity to go higher than ever before. This is inevitable in a country which is steadily gaining in population and wealth and in the development of natural resources. Stocks seem now to be established on a level, permanently higher, than during the whole period from 1865 to 1901.

A table will illustrate the effect of crises on stocks during the last forty years. Ten denominations have been selected, which have been traded in, under one corporate name or another, since 1860. Few other stocks in the whole list have run through the whole period in question, without interruption, except Panama and Pacific Mail. They have been omitted for the reason that they have been subjected to special influences. Reading is included, for a special reason, although off the list for several years; it was traded in in Philadelphia. The ten named serve all practical purposes, because they have moved up and down, substantially in harmony with the general list, during the whole period of forty years or more.

## HOW MONEY IS MADE

STOCKS	April May 1861	April May 1864	March April 1867	May June 1869	June 1877	May June 1881	* Jan April 1885	Jan March 1882	Aug Sept 1902	Aug Sept 1903	Jan Aug 1908
C. C. & St. L.	90	175	97	79	22	101½	24½	75	19½	108½	109½
Del. & Hudson	80	254	143	134	25½	114½	74½	149½	114½	181½	231
Del. L. & Wn.	75	250	112	119½	30½	128½	90½	167½	138	284½	560
Erie	17	126	52	† 40	5½	51½	9½	34½	10½	43½	50½
Ill. Central	55½	138	111½	148	48	146½	124	110	84½	173½	184½
Lake Shore	10½	118½	64½	117	46	135½	50½	140½	134½	330	330
Mich. Central	40	157	106	136½	37½	116½	46½	117	89	174½	200
N. Y. Central	68	145	95½	122½	88	152½	81½	119½	88	167½	156½
Reading	29½	165	97½	101½	† 22	62	13	65	10½	78½	164
St. Paul	9	89	40	80	17½	129½	64½	83½	59½	198½	198½
Average of 10 stocks	47½	161½	92	107½	34½	114	58	106½	74½	174	218½

\* This date is taken, instead of June, 1884, because the stocks in this list ranged lower then, on the average, although the market in general was higher than in June, 1884.

† Estimated, Erie having been stricken from the list of the New York Stock Exchange for a brief period for refusal to register.

‡ Lowest price in Philadelphia, Reading being at the time off the list in New York for refusal to register.

## VII

### NORMAL YEARLY MOVEMENTS OF PRICES

AT LEAST TWO SWINGS UPWARD, AND TWO DOWNWARD, IN EVERY  
NORMAL YEAR.—THEIR CAUSES AND EXTENT

**I**N a previous chapter, attention has been directed to the great movements in prices, which extend over a series of years, growing out of the alternation of good and bad times.

Another peculiarity of stock market movements is now worthy of attention.

When, at the end of a serious depression in business, good times are seen to loom large ahead, there occur years, like 1862, 1879, 1885, and 1904, during which stocks whirl rapidly upward, with only the most trivial reactions, for six months or a year. This is generally due to the popular enthusiasm and exultation over the return of good times, and to the existence of a large short interest in stocks, which the manipulators will not permit to cover except at high prices. The market starts, keeps going and never comes backward.

In other times, the progress of a panic, a dangerous position of bank reserves, high interest rates, and frantic liquidation cause prices to drop steadily for twelve months or so, with only the most feeble and uncertain rallies. Such years were 1873, 1876, 1890, 1893, and 1903.

In the majority of other years, however, when conditions are fairly stable, whether good or bad times prevail, and when either accumulation or distribution by prominent interests is going on, stocks follow a different course. There are always several turns in prices every year, due to manipulation by speculators; but certain ones are notable and are expected and worked for by traders. In normal markets, there are at least two strong swings upward in stocks, and two downward, every year.

Let us consider the upward movements first.

Fundamentally, they grow out of the fact, that on or about the first of January and July, the holders of stocks and bonds in this country receive the enormous sum of \$150,000,000 or more in dividends and interest on their security investments. Some distribution of this character takes place, indeed, every month, the sum ranging from \$30,000,000 to \$80,000,000. But at the beginning and in the middle of the year, the disbursement is especially heavy; and it tends to grow larger, year by year, as the country gains in wealth and prosperity.

The principal part of the great sums in cash referred to is necessarily devoted to the expenses of living. A part is expended in travel and recreation. Some of the money goes into real estate, life insurance, private business, and diverse forms of other investments. On the other hand, many millions go toward the purchase of securities. Thousands of people put from \$1,000 to \$5,000 into stocks or bonds; men of large estates, banks and insurance companies put from \$100,000 to \$1,000,000 into this class of investments. The demand for good securities is therefore much more active at the time of, or just after, the January and July disbursements than



## NORMAL YEARLY MOVEMENTS OF PRICES 107

at other seasons. It is a distinct phenomenon in finance. By concerted action, operators in stocks advance prices during those two periods (if a panic does not prevent such a venture) with a view of selling to the public, at good prices, the goods they have bought during a previous reaction. The Spring and Fall booms are cherished traditions of Wall Street.

Old hands at the business, who know a thing or two, do not always wait until their dividends and interest have actually been paid to them. If the general outlook is favorable, they begin buying in June or December, carrying their securities on a margin until the cash comes in, when they pay outright for the securities and take them out of the market. More conservative people wait until they have the money, and then, after deliberation, they buy. This has the effect sometimes of making the price movement a little different from the one which ought to rule normally.

In every normal year, since 1860, a considerable rise has been engineered from some break in the Fall or December, into January; and, as a rule, after a moderate reaction, the rise has gone on into the Spring. The slow movers advance from \$5 to \$10 or more a share. The lively stocks rise from \$10 to \$20, or more. January ends the rise in panic years. At such times, the Spring rise amounts to little.

The second rise is an incident of the Fall months. It is always equal in extent to the Spring rise, and, of the two, the Fall rise is generally the most important. Stocks start from some low level in the Spring or July and mount upward into August. Then, after a reaction, they often go higher yet into September or October. The Fall

rise is seldom omitted even in a bad year. If business is bad, or technical conditions unfavorable, the boom may be postponed until October or November, but come it will, sooner or later. In the reactions of 1873 and 1890, indeed, the struggle to put the market up in the Fall was a failure. But there was a good rally in 1893; and even in 1903, when the "rich man's panic" had cut many fortunes down a half, the Fall rally was one of great spirit, having been promoted by the declaration of William Rockefeller, that if stocks should go up five points (which they did easily) they ought to rise twenty points (which some of them did, very nearly).

No exact date can be named as certainly the top of the Spring or the Fall rise. Something depends in each year on the market position of the various pools and leading operators. If they have not yet liquidated to advantage the stocks they have accumulated, the market is apt to be maintained on as high a level as possible until the desired end is achieved. April has, however, usually seen the end of the Spring boom in stocks and September the Fall boom. In the latter season, the top has sometimes been reached in October or November.

Men of long experience never part with the stocks which give them a position in their corporations, merely for the sake of a moderate turn in the market; but, in favorable times, they almost always have transient holdings, which they sell in the Spring and Fall months, taking them back during the next good reaction. The number of men who carry not only moderate amounts of stock, but from 1,000 to 10,000 shares, for the sake of the normal yearly booms, has grown immensely within the last ten years.

## NORMAL YEARLY MOVEMENTS OF PRICES 109

Normally, there are also at least two swings downward in prices in every twelve months. A variety of causes contribute to the result; but both may be attributed mainly to money stringency and the crop situation; and it is to be noted that speculators and pools always play for these reactions, if the times do not entirely forbid.

The serious nature of a crop shortage has been explained on another page. Spring and Summer are the seasons for crop scares. Fortunate, indeed, are the farmers, if a whole year passes by without weather conditions at some time unfavorable to the growing grain, cotton and tobacco. They no longer fear the old time plague of grasshoppers, but they have other troubles. The boll weevil in the South may make a difference in the output of cotton; and rust, a mild Winter, drouth in the hot season, and unseasonable frosts have not lost their terrors. If other influences have conspired to weaken the ardor of those who are long of stocks, sudden alarm as to the crops would mean a sharp and serious decline in prices.

In 1890, the corn, wheat and cotton harvests were small ones; and this was one of the forces which led to the bad break of that year.

In 1901, hot winds in Kansas and drouth elsewhere caused a fall of \$22 to \$43 in granger railroad stocks.

During such declines, other good stocks fall in sympathy.

It must be distinctly kept in mind, that if traders want a reaction, they seize instantly upon any unfortunate development to bring about the end desired.

Violent breaks on crop shortage are usually transient, if general trade is good, because a loss of grain tonnage may be offset by other traffic. A notable case in point

was an incident of 1901. A group of large holders of Atchison and other granger stocks in New York were confronted with serious loss in consequence of the crop scare of that year in July. Troubled and anxious, they sent envoys to the West to study the situation on the spot. Mr. Armour was consulted with reference to the value of the opinion of President Ripley of the Atchison road. Mr. Armour assured his visitors with an almost religious solemnity of manner, "Mr. Ripley is the best railroad president in the United States." When the envoys called at the office of the head of the Atchison system, Mr. Ripley replied: "No, we have no corn; but we have oil; oil will compensate for the loss of corn." New business was coming forward, and the New Yorkers were advised to hold on. They did so, and made money later on their granger stocks.

It is in the early Spring, that the financial world begins to be concerned with regard to the crops. April, May and June are usually months of uncertainty. Hundreds of cautious investors sell their stocks during the Spring rise, therefore, preferring to buy them back, if necessary even at higher prices, when doubt has ended.

Other influences which operate after the Spring rise are the higher rates of interest, which sometimes prevail, in consequence of the demand for ready money among the farmers, and the coming vacations of a swarm of men, who are off to Europe, the sea shore or the woods for rest and recreation, and who all get out of stocks before going.

Selling by any large class of men inspires similar action by others; and there is in every normal year a decline from the high prices of the Spring running into May or June, and sometimes into July. It is not un-

## NORMAL YEARLY MOVEMENTS OF PRICES 111

common for lively trading stocks to go down \$15 or \$20 a share. It must be said, however, that if the promise of the crops is definite and splendid, the Summer reaction will be extremely moderate, other things being equal.

A second swing downward occurs in the Fall. It is primarily due to a scarcity of loanable funds in New York at that season and is promoted by pools and speculators. The West and South require large sums of ready cash to pay off the harvest hands and others and to start the first shipments of produce to market. Those sections draw down their balances in New York and other central cities; and other sums, large in the aggregate, are withheld from deposit. While the banks of the West and South are expected to finance the farmers and planters in the Fall months, they cannot do it without recalling millions of their surplus money from the East; and they begin to draw in August. The total amount sent away from New York for harvest purposes, each Fall, varies with the size of the crops. It has seldom been less than \$20,000,000 and has been in excess of \$50,000,000.

Such an outflow of ready cash forces the rate of interest on loans of all kinds at commercial centers much higher for two or three months. If trade is active, call money rises to 8 or 10 per cent in New York and the rate frequently soars to 25, 30 or 35 per cent. In December, 1905, in New York, before the current of remittances had turned toward the East again, call loans once rose to 125 per cent. Whatever the actual interest charge, traders find it desirable to sell their long stock, and even go short of the market, when rates are rushed up to 8 per cent or more. These operations are the primary cause of the Fall swing downward.

The September reaction is a tradition in Wall Street.

It quite as often occurs in October or November, but sooner or later it arrives, in a normal year. There is often another break in December, owing to the high rates which prevail when the banks are accumulating money for the January disbursements.

When other people have sold, and the market is down, those who wish to take advantage of the January rise buy good stocks, lay them aside, and wait patiently for the better prices, which are sure to come, if business is good and the outlook free from serious complications.

Bonds are less affected by these yearly movements than stocks, but are not altogether indifferent to them. Many men who can get 10 to 20 per cent on call loans are tempted to sell their bonds and put the money out at interest until the flurry is over. Selling, whatever the cause, if in any considerable volume, always depresses the market.

It is perfectly legitimate for an investor to take advantage of the normal swings of the stock market. In fact, it is sometimes of the greatest importance that he should do so. Every boom in stocks since 1860 has culminated at the top of either the normal Spring rise or the one in the Fall. Every considerable decline, in times of panic and depression, has ended during either the Spring or Fall break. The turning points of the great major movements in stocks, growing out of good or bad times, coincide as a rule with the turning points of the normal yearly swings. If fundamental conditions are such that a coming change in the trend of business affairs (and therefore of stocks) is indicated, an investor will be safer to sell, or buy, when the market is about to turn.

An investor will, as a consequence, pay calm and

## NORMAL YEARLY MOVEMENTS OF PRICES 113

diligent attention to the broad features of the situation and will be constantly on the alert for those signals of finance which tend to show what the trend of events is likely to be for the next few months or the next year or so. He will disregard entirely the numberless twists and small turns in prices which occur from day to day and week to week.

An investor needs hardly to be advised on one point, yet for clearness the matter may be mentioned. If the financial position is strained and stocks have started downward strongly, and if he has sold on the January or Spring rise, there will be no advantage in buying until July or the Fall months. It will not do to buy on the Spring reaction, because the market is certain to go lower before the movement is ended. On the other hand, if the market has been falling violently for six months or more, and has entered finally upon a period of comparative stability or an actual rise, and if the financial situation has eased and money is abundant and interest rates are low, then it will seldom pay an investor to try and catch the three months' turns. After a bad smash, the market is apt to have a strong rise for a year at least. An investor will do better not to sell until prices have improved materially and at the occurrence of a strong Spring or Fall rise.

The general course of the stock market at New York since 1860 is illustrated elsewhere by an important and interesting chart.

## VIII

### COURSE OF THE STOCK MARKET SINCE 1860

#### BULL AND BEAR MARKETS SHOWN GRAPHICALLY.—A CHART OF THE FLUCTUATIONS OF TEN SELECTED STOCKS

**I**N order to be fully in touch with the subject under discussion in this book, it is desirable that an investor shall know just what the stock market has done during a series of years, say since 1860.

This can be shown by a chart of the average price of a number of broad trading stocks. As go the leaders, so goes the whole market; and the movements from season to season, and year to year, of a few prominent stocks, correspond closely with the swings of the whole body of stocks.

Some of the most active, important and popular stocks of the present time were not traded in, on the New York Exchange, in 1861, and in fact had not even come into being. But there are ten representative stocks, which, under one name or another, go back to the year in question. They are:

C. C. C. & St. L.	Illinois Central.
Central of New Jersey.	Lake Shore.
Delaware & Hudson.	Michigan Central.
Delaware, Lackawanna & Western.	New York Central.
Erie.	St. Paul.



## COURSE OF THE STOCK MARKET SINCE 1860 115

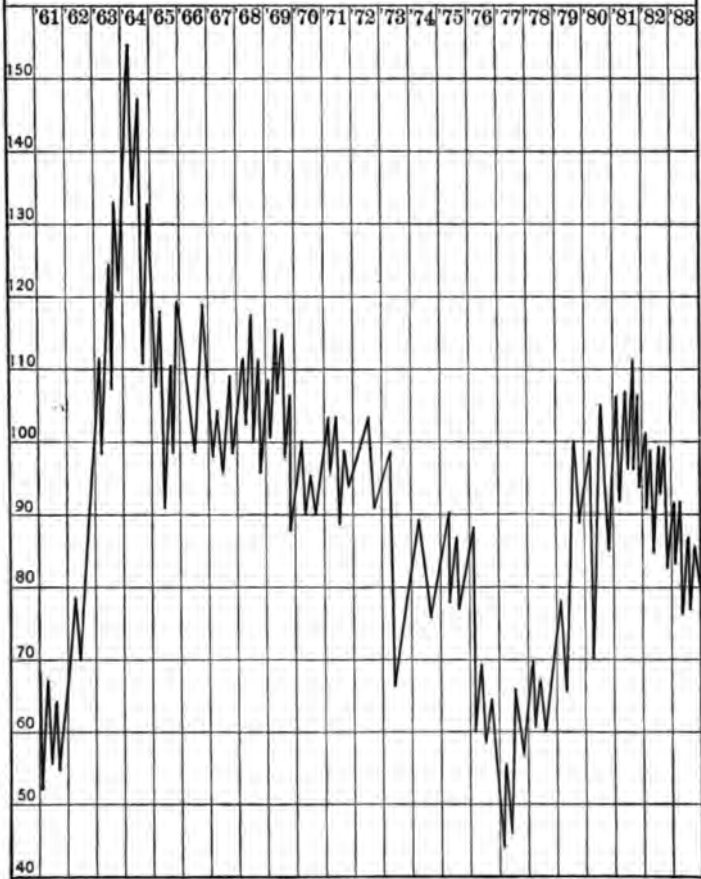
These ten stocks answer the purpose very well. They include granger, coal and general traffic railroads, and their market value had fluctuated strictly in accordance with the times and the seasons of the year. Any other group, covering any part of the whole period since 1861, would show swings in price, corresponding closely to those in the chart; and the ten named indicate satisfactorily the general course of the whole market.

Attention is called, first, to the high prices of 1864. Paper money inflation and the protective tariff underlaid this great rise. A fact which contributed to the power of the bull party in that period was the small capitalization of the railroad companies. It was no difficult matter for a strong group of moneyed men to buy up the whole floating supply of any given stock and put the price to unheard of figures. The high level of 1864 was far in excess of investment values and a long decline was inevitable, thereafter, until values had become readjusted to earnings.

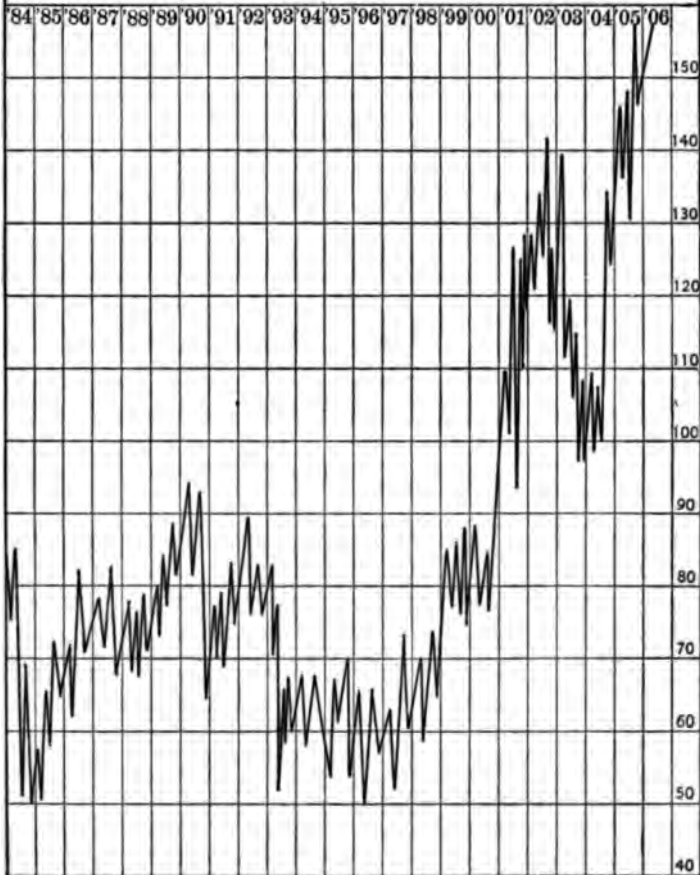
After the Civil War, a long period ensued during which the governing forces were against the prices of stocks, as a body. Reckless watering of capitalizations, contraction of the currency, rate wars between railroads, tinkering of the tariff, competitive building of railroads and immense issues of new stocks and bonds all contributed to depress the value of securities. While the market swung upward and downward, in accordance with good and bad times, yet until nearly the last of the fearful crop of reorganizations, along about 1896, the average level of prices ranged between the low point of 1861 and a point half way up to the dizzy top of 1864.

A new era then began. The country had grown enor-

**RANGE OF TEN STOCKS.  
1861 to 1905**



**RANGE OF TEN STOCKS.**  
**1861 to 1905 continued**



mously in population and riches. Earnings began to be sufficient to pay dividends upon millions of formerly almost worthless stocks; and in 1901, the stock market entered upon what may be called an entirely new field. The average price of stocks—not only those which appear in the chart, but all others—rose above the range of the previous thirty-five years and in 1905 passed far beyond the top of 1864. So far as human judgment can discover, the average level of prices is likely to remain in this new field for a generation or more. If paper money inflation played a part in the excited rise of prices in 1864, gold inflation is equally active now. Panics there will be, as there always have been. Periods of depression will occur. It may be that serious changes will take place in the tariff and other policies of the United States, which will result in such reorganizations as will squeeze the “water” out of the stocks of many companies which must be considered as overcapitalized, even in this day of large earnings. The stock market cannot escape the long declines which bad times always ensure. In spite of all these considerations, it is probable that prices will never again see the low level of 1860, 1877 and 1896, unless high finance should decide to enter upon another era of reckless watering of capitalizations, or socialistic madness take possession of the American people, or such action should be taken with reference to the protective tariff as to destroy the prosperity of the country, or the modern mania for “regulating” railroads should finally result in a serious diminution of their earnings.

## IX

### POINTS TO BE WATCHED

EARNINGS.—STATE OF THE CROPS.—COMPETITION, THE TARIFF, AND  
MONEY SUPPLIES.—TREND OF THE TIMES.—GOLD PRODUCTION.—  
SOURCES OF INFORMATION

A NUMBER of broad influences affect the value of stocks and underlie the booms and periods of depression which succeed each other in the business world. To these, an investor needs to be alive.

Cynics believe that manipulation is the only factor of importance in the stock market. They assert, that, if the "big men" want stocks to rise, they rise, even if some reasons exist why they should not. Conversely, if the same influential personages want stocks to go down, they fall, even if the times are good. This is true within certain limits. Nevertheless, it is beyond dispute that leading interests never oppose an unmistakable trend of the times. Even if they are disposed to, the strong may give battle, but they are defeated by the irresistible force of conditions. So many proofs of this exist in Wall Street history, that the matter seems hardly worthy of argument.

What are the underlying conditions which should be carefully watched?

## EARNINGS

THE value of the whole body of good securities, and of each particular one, depends almost wholly upon earnings. Those which have voting power are always worth something for control of corporations. But it is axiomatic, that, whether a stock pays a dividend or not, the larger the earnings, the higher the price.

Growing earnings mean higher prices for the stocks and bonds. Reduced profits, if due to other than transient or accidental causes, forecast a fall, which will be as certain in results as the laws of gravity. One has simply to consult the high and low prices of a number of selected stocks on another page, with the dividends paid thereon in different years, to realize this fully. Vigorous and skillful manipulation may force a good dividend paying stock far above its investment worth, but high prices cannot be maintained for a stock which does not earn anything.

Whether Union Pacific shall sell at \$4 a share, as it did in 1895, or around \$185 as in the Fall of 1906, is regulated primarily by the earnings and the size and certainty of the dividends. When United States Steel, preferred, then and yet paying 7 per cent, fell to \$50 a share in 1903, the effective force in bringing about that very low price was the general fear that 7 per cent would no longer be paid—the dividend on the common stock being then in peril, as later events proved. The recent rise in the Steels is due entirely and directly to the handsome earnings, the ability of the corporation to pay 7 per cent on the preferred in dull times, its enormous surplus, and

the return to dividends on the common. Missouri Pacific passed its dividend in 1891 and worked down from \$77 a share to \$10 in 1897; but when larger profits pointed to an early return of the stock to the rank of a dividend payer, Missouri Pacific rose irresistibly to \$100 in 1901, even before payments were actually resumed. Amalgamated Copper went to \$130 a share in 1901, of course through able manipulation, but the stock was paying 8 per cent; when the directors voted a dividend reduction and put the stock on a 2 per cent basis, the inevitable result was that in the panic of 1901 the stock dropped to \$34 a share. It has since risen to around \$119 on being placed on a 6 per cent basis. American Smelting, common, once a worthless stock, given away as a bonus, sold as low as \$37 in 1902 and 1903; but, after dividends were begun in 1904, a steady rise followed, and that once despised stock sold as high as \$174 in the Winter of 1905/6.

The market is full of recent instances of rise in price among non-dividend paying and common stocks, which have resumed dividends after a long suspension or are approaching the time when initial dividends must be declared.

That earnings are the vital factor seems hardly worth farther argument.

Railroads usually issue a monthly report, often a weekly statement, and always an annual report, in which net profits are set forth and compared with those of corresponding periods in the year before. Gross and net earnings of the principal lines, by months, are compiled and summarized by several of the financial weeklies and dailies of New York city. These are worthy of careful

perusal by investors. They show at a glance the trend of the times as to railroad earnings and the prosperity of each of the principal lines.

Among industrials, the best example of candor in dealing with the public is shown by the United States Steel concern, which issues an elaborate quarterly statement of profits and state of the business. It forms one of the most valuable items of news in the financial papers. Other industrials are not all so candid; but many of the best of them publish annual reports of great clearness and value.

#### FOREIGN COMMERCE

A FRUITFUL source of ample money supplies is the foreign trade of the country; and conversely, at times, a serious drain upon the financial resources of the banks arises from an adverse balance in foreign commerce.

The Government issues a monthly statement on this subject, which shows not only the balance for or against the country in the merchandise transactions, but also the net export or import of gold and silver. It is printed in all the daily newspapers.

Statistics are sometimes dry reading; but those of the foreign commerce of the United States are always eloquent and should receive the most careful attention.

#### CROPS

A LARGE part of the income of all railroad lines is derived from the shipment of grain, produce and cotton. From 6,000,000 to 15,000,000 tons of these articles are shipped by rail to seaboard cities, every year, for exportation to



foreign lands. A far larger tonnage is moved by rail from farm and plantation to the cities and other settlements of the country. In the fiscal year of 1903, the contribution to railroad traffic from this source was more than 30,000,000 tons of grain, 10,000,000 tons of flour, about 3,000,000 tons of cotton, and a vast additional quantity of potatoes, fruit, tobacco and other products of the harvest. More than once, in our history, in dull times, has a loss in other earnings been made good by the transportation of agricultural produce, and, in good times, bumper crops are of enormous and direct value to every railroad in the land.

The productions of the soil affect powerfully the prosperity of the United States in another way. Their money value in a good year is almost bewildering. The staple crops which are reported on by the Government in its monthly statement of acreage and condition approximated a money value of \$3,500,000,000 in 1905; and a fluctuation of \$500,000,000 in this immense total, which is not uncommon, is felt at once in the business world. A boom in stocks has, more than once, originated in good crops. Depression has at times begun with a partial crop failure.

Bountiful harvests have another and interesting effect, in that the exportable surplus enables the United States to pay off its borrowings of money abroad and to create a credit, which, if large enough, ensures early importations of gold.

There is no topic more deserving of interested attention than the state of the crops. Valuable data on this point are supplied from Washington. On the first of each month, an estimate is published as to the outlook in cotton production. On the 10th, a similar report is made as to acreage and condition of the staple grain crops. While none of

these estimates is to be taken too literally, and while some of them have been exposed to serious criticism, they are all eagerly looked for by business men; and they reflect at least the general facts as to the promise of the harvest.

Weekly and other reports are also made by the Weather Bureau. These are all printed in the daily and financial newspapers and form an important guide.

One of the best of the New York financial dailies also compiles its own estimate on cotton prospects.

The profits, and therefore the stocks, of railroad lines which run through the grain and cotton sections, are affected in the most direct and powerful fashion by the promise of generous or stunted crops; and as they go, so goes the general market. Investors need to keep in touch with the crop outlook. Wall Street always discounts the future and never waits for earnings to be affected actually before adjusting prices to what it sees coming.

#### DOMESTIC TRADE

A SLACKENING of trade after a great boom precedes every financial crisis; and an investor must be as alert to detect the signs of a coming change of importance as are the bankers, rich men and stock operators, upon whom the fortunes of the stock market depend.

It is axiomatic that all railroads are affected directly and seriously by active or dull times and industrial stocks peculiarly so. The subject of the state of domestic trade is one which requires constant attention, and never more so than when a boom or a reaction has run on for a number of months or years.

Indications of the general course of trade are at the command of all. Nearly every one toils in America; and whether business is good or bad is a constant theme of discussion among acquaintances. A number of authorities can be consulted, which afford a wide and accurate view of the whole business field. Among them are:

The careful—they may almost be said to be official—reports on the iron and steel industry, issued by two leading weekly newspapers devoted to that trade. As a matter of wide-spread interest and importance, those reports are republished now by nearly all the leading daily newspapers.

Resumés of the present state of trade are sent to the press, every Saturday, by the two mercantile agencies of New York City. These Argus-eyed concerns are in close touch with correspondents in every city and settlement in the Union; and their reports are accurate, dispassionate and valuable.

Various sound and conservative financial weeklies and dailies make a specialty of publishing not only the news but the drift of events in important industries; and they are among the very first to detect and announce a quickening or slackening of business.

Bank clearings in principal cities are compiled weekly and are worth watching.

#### COMPETITION

THERE is no influence to which a particular stock responds more quickly than new and damaging competition. It would be almost impossible to point out a form of business in the United States which is not exposed to competi-

tion in some form or other. Even the great railroad lines, which seem to have an entire monopoly of local traffic, even the Standard Oil Company and various of the other so-called trusts, which appear to come the closest to monopolies, live, move and have their being in an atmosphere of competition and not one of them is free from more or less of it.

Community of interest has minimized rivalries to some extent but has by no means abolished it. Every railroad man will agree to that.

While competition is a necessary condition, under which business is carried on, it is only such an increase of competition as is likely to exert a vital influence upon earnings that proves disconcerting.

When Andrew Carnegie proposed to build a tube plant in Ohio in opposition to the National Tube Company, this was a serious threat; and the common and preferred stocks of the company named promptly fell \$19 and \$13 a share, although no actual competition could have been felt for a year afterward.

The genuine nature of the calamity of the outbreak of new and unreasonable competition was well exhibited by the loss of earnings consequent upon the rate wars between trunk line railroads in the '70s and '80s.

An extreme case of loss inflicted upon stockholders by new and dangerous competition was the historic break in Pacific Mail and Panama Railroad, after the opening of the overland rail route to California. Those stocks had sold at unheard of prices during the Civil War period, as a result of enormous earnings. In September, 1868, Panama was quoted at \$369. Pacific Mail went to \$329 in 1865, and even after a stock dividend of 33 $\frac{1}{3}$  per cent in 1866, it sold at \$174. More than a year before the

Union Pacific route was thrown open for business, far seeing holders of Panama and Pacific Mail stocks became convinced that trade and travel would naturally seek the shorter and more expeditious line to San Francisco; and they began to sell out. By the time the overland railroad was actually in operation, less attentive stockholders took alarm also and selling was more general. By 1870, Pacific Mail had fallen to  $\$30\frac{7}{8}$ , and by 1871, Panama was down to  $\$49$ .

New York Central stock was worth  $\$155$  in January, 1881, but the West Shore road was finished in 1882; and New York Central fell to  $\$81\frac{3}{4}$  in June, 1885, in consequence of loss of earnings. It was then that the Vanderbilt interests, in desperation, acquired the entire capital stock of West Shore and put an end to a competition which was slowly wrecking the prosperity of the older company.

Metropolitan Street Railway sold at  $\$269$  in 1899, at which price it may or may not have been dear, all things considered. But after the Subway in New York had been opened for traffic and had diverted millions of fares to its own coffers, Metropolitan sold as low as  $\$103$ .

No doubt, the effects of excessive competition have come within the personal experience of thousands of business men. No need to dwell upon its consequences. But it is important for an investor to be wide awake to every sign of the coming of serious rivalry against companies whose stocks he owns.

#### TARIFF CHANGES

THE propriety of high or low duties on foreign goods is in dispute among politicians and economists, and has

ever been since the adoption of the Constitution. The subject will always be with us.

No one will contest the point, however, that the substitution of one class of duties for the other is a momentous event in the affairs of any country.

In the United States, the business world has become accustomed to the protective principle; and even the prospect of reduced duties has always chilled the spirit of enterprise, while the reality has always given a set back to business, sooner or later. On the other hand, enactment of a protective tariff, in lieu of one for revenue only, has always proved exciting and has quickened into intense activity the looms, forges and machinery of the entire country.

The backward state of American industry prior to the Civil War is held to have been due in large measure to the relaxation of protection under the tariff laws of 1842 and 1857. There can be no question, that the twenty or more tariff enactments from 1861, when the Morrill protective tariff went into operation, to 1872, when the system had been fairly adjusted to the requirements of home industry, aided materially in developing the mines, sustaining the factories against foreign competition, supplying the railroads with an immense and profitable traffic, and promoting the farming interests of every section of the States.

The lower duties of 1883 on many manufactures added to the force of other evil influences, which ended in the crisis of 1884.

The crisis of 1893 rose in a distinct measure from the agitation in the then Democratic Congress for a tariff for revenue only, which eventuated in the Wilson bill.

The prosperity which the States now enjoy must be attributed in a marked degree to the protective tariff, enacted under President McKinley.

All writers on crises agree in giving great weight to tariff changes. An investor should therefore at all times be fully informed with regard to such actual or possible revolutions in political control at Washington, as are likely to have a bearing on the tariff laws.

#### SUPPLY OF MONEY

No BULL campaign in stocks is possible without ample supplies of money and moderate rates of interest, at the outset, and this may also be affirmed of a boom in business.

When for any reason, cash holdings of the banks are low and high rates are charged for call and time loans, there is always danger of a decline in securities; and the condition of the banks may actually foreshadow an approaching crisis.

National banks in New York city are compelled by law to maintain a specie and legal tender reserve, equal to 25 per cent of the amount of their deposits. When reserves have fallen below the legal limit, the loaning power of the banks is ended for the time being. If reserves show a deficit, the banks are perforce obliged to call in a part of their loans. Stock speculators are then obliged to throw overboard a part of their loads in order to raise funds wherewith to repay their loans. Selling of this compulsory character invariably means a slump in the stock market and possibly a long decline. It may also lead to liquidation in business enterprises.

The most recent instance of this kind was the situation in Wall street in the Fall of 1902. The banks had reached the limit of their ability to finance the pools and syndicates, which had boomed stocks to the dizzy pinnacle of prices at that time. They called loans, initiating the downward movement in stocks, which ended in the "rich man's panic" of 1903 and was attended with a reaction in general business.

It is not difficult to keep fully in touch with the condition of the national banks. Every few months, the Treasury at Washington calls upon the banks of the United States to make an elaborate report of their deposits, loans, assets, etc., and the replies are tabulated, summarized, and published in the associated press dispatches. The situation in the United States at large is disclosed by these reports. It is important to watch for them.

In New York, and other clearing house cities, a statement is issued by the associated banks every Saturday forenoon. In New York, at any rate, this weekly statement is not a finality as to the whole banking position, for several reasons. Loans and deposits of the trust companies are not included, nor are those of such large private banks as J. P. Morgan & Co., Kuhn, Loeb & Co., the Seligmans, etc., nor of some other institutions. Nor does the statement represent the situation at the close of business on Friday, but sets forth the average of the six days since last statement. Furthermore, there is always a hidden reserve of loanable funds, consisting of such part of the capital and surplus profits of the banks as is not invested in circulation. In New York, this hidden reserve amounts to more than \$300,000,000. Imperfect though it be, the weekly bank statement is valuable, because it af-



fords an important clue to the actual situation. It is closely scanned by every active business man.

Public attention is generally fastened upon the item of surplus reserves, because the loaning power of the banks depends upon that item. A serious decline in reserves indicates the approach of high money and leads to anticipatory selling of stocks.

A feature of equal importance, however, is the item of surplus deposits. Investors are advised to watch the difference between loans and deposits. Normally, the deposits should exceed the loans. In dull times, they always do. In New York, the surplus of deposits over loans rose in 1899 to \$144,000,000; in 1904, to \$110,500,000. When an abundance of money is indicated by the magnitude of surplus deposits, interest rates are sure to be low; and one may rely upon it that the big men and the restless spirits of Wall Street, who have all been held in leash by a preceding period of low reserves and high money, are quietly preparing for a bull market and a revival of business, even if the movement has not already started. The banks always promote such a movement, because they are naturally desirous of higher rates of interest on their money. The first activity may be in the direction of a "shake out" in stocks, in order to eliminate the existing long interest as far as possible. Within a few months, however, a bull movement will be found to be under headway and coincidentally a revival of business enterprise. In the tables in the latter part of this book, the reader will see how the origin of a bull market coincides with a great surplus of money in the New York banks.

On the other hand, when surplus deposits are dangerously low, a situation is revealed which may and com-

monly does foreshadow a serious decline in stocks or an actual crisis. The catastrophe may be postponed for a year or more by manipulation and management, but it is sure to arrive.

In New York, the danger line is in the vicinity of about \$30,000,000 excess of deposits over loans. When surplus deposits have fallen to that narrow margin, the cause may be looked for in the activity of general business and of the speculators in Wall Street; and a time is approaching when call loans should rise above 4 and 5 per cent. When deposits fall below zero, (that is, when they are less than loans) the evil day has dawned. Interest rates are then liable to go to 10, 15, or even 25 per cent (and higher) on call loans. If such prohibitive rates are avoided, the result will be due to some extremely happy circumstance or the concentrated and herculean efforts on the part of leading bankers. No operator or pool can carry stocks on a margin profitably, if 10 per cent or more is charged for call loans. At such times, it is inevitable that stocks will be freely sold. What happens to prices at such junctures need hardly be referred to.

Previous to the resumption of specie payments, Jan. 1, 1879, an excess of loans over deposits was the chronic state of affairs at the New York banks. Specie had been driven out of the country in enormous amounts by paper money inflation, and to some extent had been hoarded by individuals; and gold formed a relatively small part of the cash holdings of the banks. Great bull markets had been carried on, during that period, through the use of paper money, but after the resumption of gold payments the country was on a different basis. Gold gradually came back to the banks and deposits tended normally to

run in excess of loans. Now, taking the period since Jan. 1, 1879, deposits have fallen below loans on several occasions, as follows:

1879 to the last week in 1883, during which time (with the exception of a few weeks in 1881) loans ran higher than deposits, every week of each year. Interest rates were high, and, after the middle of 1881, stocks declined steadily for three years. In 1884, a turn in affairs took place and thereafter deposits were normally in excess of loans and the market had a rising trend.

In 1887, loans and deposits nearly balanced the entire year; but in the Fall, loans were in excess, and stocks had a strong reaction.

August to December, 1890, when leading stocks fell an average of \$20 a share.

May and September, 1891, call money going to 25 per cent in the latter month. In both months, a moderate downward turn took place in the stock market; and, as the banking situation did not improve sufficiently, the bull market culminated in February, 1892.

June to October, 1893, call money rising twice to 74 per cent and stocks falling \$20 to \$35 a share, while a crisis and panic was sweeping the country.

August to November, 1896, when, prices being already low, they went lower yet and reached a level, on the average, beneath that of any period for the preceding twenty years, taking the stocks then in existence. Call money was quoted as high as 127 per cent in October.

October and December, 1902, when the disastrous reaction of 1903 was coming on. Call money was loaned out in large quantities at from 10 to 35 per cent during this time.

All of 1903, except January and February, a crisis prevailing, and stocks tumbling for six months, although the liquidation so relaxed the tension that call money went no higher than 15 per cent during the panic.

October, November and December, 1905, and the whole of 1906, save three weeks in January and February, and one in July, call money rising to 125 per cent on one occasion, and high rates recurring

with every outbreak of activity in stocks and business. This has been an exceptional and remarkable period, and seems to foreshadow disaster. It is probable that brokers and operators provided themselves with time money at reasonable rates, having resolved never to place themselves at the mercy of the banks, again, as they were in 1902. The bull market halted more than once and there were several moderate breaks in stocks. Yet general business continued booming; and the pools and syndicates marvellously weathered the months in question.

A noteworthy fact in connection with the matter of surplus deposits is this, that loans were \$39,000,000 more than deposits in New York in the terrible year of 1893; \$40,000,000 more in 1903; \$24,000,000 more in the latter part of 1905; and over \$62,500,000 in December, 1906.

When the banking situation becomes dangerous, as indicated by the diminution of surplus deposits and especially after they have fallen below zero, a man who believes that the bull market can be carried yet farther and a reaction in business avoided must know where ample supplies of money can be obtained. If foreign trade, deposit of Government money in the banks, an inflation of the currency, a flood of new gold from the mines, extensive foreign purchases of American securities, or some other influence can not be brought into play to recruit the exhausted resources of the banks, then there is no other recourse except liquidation in stocks and a slowing down of business enterprise to relieve the situation.

It is sometimes said that a bull market is possible with high money. A part of the explanation of this is the fact, that recovery in stocks, after a crash, begins, while the banking situation is yet near its worst but when improvement is clearly in sight ahead.

## GOLD PRODUCTION

ACCORDING to Dr. Adolph Soetbeer, an authority on this subject, not more than about \$3,000,000 of gold was added annually to the world's supply up to the time of the discovery of America. When the Spaniards began to take unto themselves and send to Europe the riches of Peru and Mexico, the annual addition to the world's stock of gold was larger but had not risen above an average of \$14,000,000 a year up to 1840. Marshall's find in California and the discoveries in Australia gave an impetus to the output of gold. In 1860, the yearly addition to the general stock of gold was about \$140,000,000. Many of the first deposits and mines having been worked out, the annual production fell to \$115,000,000 in 1885.

South Africa and Alaska have since come into play. According to George H. Roberts, Director of the Mint at Washington, gold was poured into circulation in 1904 to the amount of \$347,150,700. The mines are now even more prolific and are sending out more than \$1,000,000 of the metal every day. The output in 1905 was nearly \$425,000,000.

Students of finance are of the opinion, that the great mass of gold which is being added to the reserves and coinage of the civilized world will tend to minimize any serious monetary stringency hereafter and will have the effect of a mild and slow inflation of prices of stocks and all commodities.

Frank A. Vanderlip, the banker, has pointed out the startling fact, that, at the present rate of gold mining, the gold coin of the world will be doubled in the next twenty

years. It now amounts to \$6,000,000,000. Should there be no interruption in the stream of treasure now pouring into the mints, the effects of gold inflation are likely to be more rapid in coming years.

It is doubtful if an enlargement of the world's stock of gold will ever prevent periods of monetary stringency. The demands of governments and the inexhaustible energy of business men will always keep pace fully with banking resources. More gold may however minimize the evil.

SOME time is likely to elapse, after beginning the study of broad conditions, before an investor will be able to apply his information correctly to the concrete subject of the time to buy and sell securities. He should study them diligently, however, and the exercise will prove of the utmost service in the course of time.

The main point is to discover, as far as possible, in good times, the approach of a crisis and reaction in trade; and, in bad times, the coming turn for the better.

Suppose that the times have been booming for a few months or years! Examine now the less obvious facts of the situation! Are loans in excess of deposits? Are interest rates high? Are financial men anxious about the supply of money? From what direction can relief, if any, be expected? Are corporations in the market for more money, at the very time, when money is scarce; and are new issues of stock and bonds being launched, enormous in the aggregate? Are wages rising? Are the prices of commodities high? Have stocks been bulled to a height above actual investment worth? Is foreign trade good or the reverse? The promise of the crops, is it

good or the contrary? Does extreme optimism prevail and is personal extravagance seen on every side? Have there been serious exposures of wrong-doing and fraud, and is there reason to believe that more are forthcoming? Has a great calamity, like the Chicago fire or the San Francisco earthquake caused a tremendous loss of capital and impaired the financial resources of the country?

Some one or more of these evil factors may always be present in affairs, without great harm; but when a majority of them combine, the situation is growing dangerous; and a prudent man will get out of stocks on any boom in the market, and stay out. The situation is sure to be doubly precarious, if the stock market has had four or five years of improvement since the last depression, or if it has had a steady rise for a year or so, without a serious reaction.

Per contra, assume that a reaction in trade and stocks has lasted for one or two years at least, and that there has been thorough and severe liquidation. Failures have been heart-rending. Mills and shops have reduced their output, thousands of workmen have been discharged, stocks of goods on hand have declined, and general retrenchment has been enforced. Now look at the resources of the banks! Has idle money accumulated there in great stores? Are interest rates low? Are stocks selling on a 4, 4½ or even 5 per cent basis? Has the stock market reached a state of prostration, where bad news does not suffice to send prices lower? If these factors are all present, then an investor can buy back his stocks at any time, without waiting for the final drive at prices.

Both at the top and at the bottom of the market, several weeks or months are likely to elapse before there is any

important change in prices. An investor need not be misled by appearances. If he has bought on a reaction, and held on through several months or years, and has a good increment on the value of his stocks, he can sell when the situation is dangerous, with absolute equanimity. At the other extreme, he can buy. In both cases, he must resign himself to wait for several months or a term of years, before the time comes for him to take action anew and either buy or sell his favorite stocks.



## X

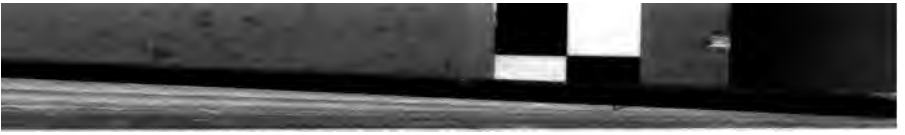
### TURNING POINTS IN THE MARKET

HOW THE MARKET ACTS AT TOP AND BOTTOM OF LONG SWINGS.—THE  
ART OF MANIPULATION.—PHENOMENA OF BULL AND BEAR  
MARKETS.—CHARTS

**S**OME suggestions have been made in a previous chapter, which ought to aid an intelligent man to form a judgment as to underlying conditions. Are there phenomena in the way the market acts, at any time, which will convey an additional message, with reference to the propriety of buying or selling his stocks?

If any suggestion can be gleaned from this source, it is of the utmost importance to the private investor.

Looked at broadly, price movements in the stock market go in long swings. Some of these last for several months; others, barring the occasional reactions, for several years. A rough idea of the movement can be gained from the familiar comparison with the ocean tide rising upon a coast. The flood advances slowly at first until it has made some headway; recedes part way; advances to a higher level; again recedes, but not so far as before; and then again advances, finally with a rush—the surface of the ocean broken continually by huge swells and the swells, diversified with smaller waves; and at the end of the whole long rise, the coast beaten by heavy billows. The tide then turning swiftly and falling for a long time,



the surface broken as before, and at the bottom of the ebb, the waves moderate or the sea almost calm. The comparison, which is not a new one, must be qualified in several respects, and mainly by the circumstance that the ebb runs more swiftly than the flow.

The great swings in prices correspond with the cycles in general trade and industry; but they begin almost invariably before there is any important change in affairs at large.

The first impulse in either direction is apt to originate among men who have large fortunes invested in banks, railroads and factories, and whose responsibilities are so vast, that they are compelled, both for the sake of their fellow stockholders and themselves, to watch closely every sign of coming changes, which may affect the prosperity of their corporations. They are the first, as a rule, to detect the cloud no larger than a man's hand, which may overspread the sky. They are the first to note the first faint streaks of promise, which herald the dawn of a better day.

Managers of the railroads, which traverse the grain and cotton fields, make it their duty to be acquainted with the condition of the growing crops from planting to harvest. Various interests in the financial world have an independent service of their own for collecting the same information. Officials of iron and steel companies are alert to every sign of a slackening or a more insistent demand for material; and they note fresh eagerness on the part of buyers, or a cancellation of orders, before the public are aware of the facts. Bankers are necessarily the first to mark increasing courage on the part of merchants and to know whether they foresee good or bad business

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ahead. From a thousand sources of information, men of large means learn to forecast the future of business and of earnings (and thus of stocks) and to adapt their own course to the coming changes. Most of the information, not all, but certainly part of it, is placed at the service of the public by the financial dailies and weeklies, whose keen and educated reporters are, from professional pride, as anxious to be the first to unearth and publish important data of this class, as are the bankers and capitalists to obtain it. If they do not get every important fact as soon as the bankers do, they are at any rate certain to discover it soon afterward and to publish it to the world in time for all practical purposes.

Large fortunes have been made through the promptness with which men of wide acquaintance with affairs have addressed themselves to the future, at critical periods, no matter whether the spirit of the moment were that of the deepest gloom or the most unbounded optimism.

Quiet buying of good stocks and bonds in times of depression by such men, and, conversely, quiet selling of such securities as are not needed for control, in a period of enthusiastic prosperity, mark the true turning points of the market.

But such men are not by any means the only active factors in the stock market. Hundreds of keen, able and brilliant men buy and sell stocks for the profit to be derived from their transactions; and among them are several who conduct campaigns of great magnitude, for themselves or others.

Some of these men aim at the actual control of corporations and may in the end retire from active speculation to become sober and conservative managers of properties.

Commodore Vanderbilt and Jay Gould were of this class; but, during the creation of their fortunes, those two men of genius were daring operators in stocks, planning and managing great campaigns, although they were compelled to employ many brokers to carry out the details. At the present day, James R. Keene, John W. Gates, Jacob Field, and a few others of kindred abilities are the leading operators. Thomas W. Lawson, of Boston, should be added to the list. They have all grown into prominence since the Civil War. Nearly all are members of the local stock exchanges, in order that they may have the advantage of the smaller rates of commission on purchases and sales which prevail among fellow members. All of them possess fortunes won on the field of financial battle. In the course of time, all of them will retire from active speculation; but their places will be filled by younger men; and as a force in stocks, the independent operators will always have to be reckoned with. Through long experience, they have become expert manipulators of the market; and their talents in this direction lead to the employment of some of them, from time to time, by great financiers, for the conduct of important campaigns in stocks.

Easily the prince of them all is James R. Keene, a man of cool, sound, alert intellect, hard as steel, brilliant in execution, patient, and amazing in the extent and variety of his information. Long a successful manager of bear campaigns on his own account, and perhaps better fitted by temperament for that side of the market, Mr. Keene took the bull side in 1901; and it was he who marketed United States Steel, common, at from \$45 to \$55 a share. His other achievements have been remarkable.

It is such men as these who undertake the actual man-

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agement of bull and bear campaigns. The market reflects their operations and purposes.

It is to be noted that a campaign in stocks is a real and serious matter. If the security market did nothing except reflect leisurely buying and selling by actual investors, it would seldom move rapidly in one direction or the other. But the market is not left to itself in this way.

Whether arising from the impatience of the American temperament, or from a desire natural to all men to have a thing over with and to attain results quickly, it is a fact, that whenever the force of circumstances dictates either a serious reaction or a rising market, men do not wait to let events take their natural, slow and orderly course. They promote the movement, with a view to producing tangible results as soon as possible. For any such campaign, a number of important and delicate details must be arranged. Nothing is left to chance. Nothing is done hap-hazard. So far as is possible, every contingency is foreseen and provided for.

No operator can go on the floor of an exchange and do all the buying and selling himself—at any rate, without revealing his plans to a certain extent. A number of brokers must therefore be employed. Each member of a pool must be instructed also, concerning the part he is to play in the buying and selling. Private inquiries must be made, which will bring to light, as far as practicable, the extent of the existing long or short interest in stocks. It is also necessary, in some cases, to arrive at an understanding with the large owners of a given stock, which is about to be manipulated. The plotting of a campaign involves a thousand other details. Oyama, fighting his way into an enemy's country, never had a greater variety

of preparations to make, than James R. Keene, in charge of a great campaign in stocks. The pools, also, consult frequently and act together.

No bull market will ever be undertaken until underlying conditions are ripe for one. There must be ample supplies of money, interest rates must be moderate, and liquidation virtually ended. It is upon these points, that an investor should fasten his attention. With reference to the banking situation, no one need ever be in the slightest doubt. In June, 1904, for example, when surplus deposits in New York were \$75,000,000 (they afterward rose to \$110,500,000) when time loans were not higher than 3 per cent and call money 1 to 1½ per cent, the flag had already been waved for a start in a bull market. Every man could have read that sign for himself.

As for liquidation, in any year, its conclusion is likely to be made public soon afterward. Brokers who issue market letters, newspapers which comment on market factors, and advisory houses which make it a business to guide clients in the buying and selling of stocks, are reasonably certain to know when liquidation has practically come to an end.

When the ground work is laid, as above indicated, for a rising market, an investor should consider the propriety of buying back the stocks he has sold on a previous swing upward.

The first care of the leader of the bulls is to make sure, so far as in him lies, that every speculative long account has been sold out, or that the stock will not be thrown on the market at an embarrassing moment, and that the petty traders and the public have been pretty well shaken out. Prices are kept weak and made to look as though

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destined to go lower yet. The woman who bought, from the proceeds of a Pullman dividend, one share of United States Steel, common, around \$20, as her private speculation, and sold it in despair at \$9, just as the bull market of 1904 was about to begin, was a perfect type of a great class of people, rich and otherwise, whose holdings the manipulator wishes to have liquidated, before aggressive bull tactics are resorted to. This is one reason, why the very first act, after improvement has actually set in, is often to put stocks lower than before.

Thousands of small traders, and investors who are at sea about Wall Street methods, may have held through the final dip in prices; but it will not be an absurd expectation that they will hasten to sell on the first important rise. As these people have been proof against fright, an effort will be made to tire them out. This policy explains why, after the market has had a long and continuous decline, it is apt to remain utterly inert and paralyzed for weeks and even months. Great operators do nothing in a hurry; they have infinite patience. During this period, prices fluctuate feebly and uncertainly. Quick slumps follow the rallies. A few stocks are put to new low records, even while the balance of the list is edging its way unobtrusively upward. Many owners of stocks have been in the habit of selling at such a time as this, tired out, disgusted, and fearful of even greater losses. Exactly when they ought to buy, they sell. It is what the operator wishes. After the situation has been liquidated as thoroughly as possible, active operations for the rise begin.

The small investor needs to wait patiently and watch carefully for such periods as these, which are turning

points in the market, and are called and actually have the character of "periods of accumulation." Banks, pools and the "big men" are buying, whether they advertise the fact to the world or not. Low interest rates, ample money supplies, and a sold-out stock market are irresistible temptations to organize an upward movement. When bad news no longer drives prices down, and underlying conditions are all right, the bear market is ended.

In the early stages of a bull market, many devices are resorted to, having for their object to mystify the public and prevent them from buying stocks. So far as the pools have the power to do so, they withhold from view the favorable features of the situation. Heads are shaken and pessimistic comments somehow creep into the newspapers. Rumors of lower prices are afloat. Something seems to be "hanging over the market" and small buyers are unconsciously led to "wait until the situation clears up a little." Meanwhile, the formation of a short interest is sedulously cultivated.

In due time, prices are shot upward a few points in two or three days. Those who are short wait to see what this means. Buyers think they will now go in, on the next reaction. In only too many cases, a reaction never comes; and if it should do so, it is so abrupt and unexpected, that buyers are frightened and do not go in at all. Traders may even go short a little more.

Two or three stocks are taken hold of, now, and advanced, generally the high-priced ones, of which there is a limited supply in the Street and of which the general public have little or none. Later, another group is advanced. The "cats and dogs" have their turn in time. Then the standard stocks are again bulled. It is at this



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stage of the rise that a good manipulator shows to the best advantage. He keeps the market rising and gives it an appearance as if the rise were nearly over. Yet the tide continues to flow and a new "high record" is made every week or two by various good stocks. All these proceedings may have consumed several months. Finally, in despair, thousands of buyers rush in and pick up their favorite stocks, sometimes just as the market is nearing its top for the time being. This is precisely the end at which the manipulator has been aiming. The market is kept active. Million-share days and even two-million-share days are witnessed at the Stock Exchange. "Now, at last we have a great bull market." Under cover of the excitement, pools and operators unload their long stock on belated buyers or the wildly enthusiastic traders, and maneuver for a ten to thirty point downward swing.

At this critical period, a variety of devices are employed to restrain the public from selling. Dividends may be raised on popular stocks. Rights may be given on others. Gold may be imported. Rumors abound that certain stocks are "going up ten points" or more. Often, non-dividend payers and "wild-cat" stocks and even the great high-priced stocks are actually sent up, to give credence to the rumors. Finally, when a strong break comes, high money or some other plausible influence, temporary in its nature, is put forward as an excuse, and the break is even utilized to induce the public to buy more stock.

This is an important moment for an investor. Again he must study the banking situation and all the other points which need to be watched. A market, which will not advance farther on good news, is over with. Too much good news is always a bad sign, because the good news

is apt to be saved for the culmination of a bull market. Many wise men sell out on general principles when the news is too good. If the newspapers are all bullish, if you hear from all your friends that stocks are going ten or twenty points higher, if even your clergyman and other persons who are entirely exempt from suspicion of an intentional desire to mislead, help swell the chorus, the time has arrived to sell out, especially if the market has had a long and continuous rise. And this has always been true, no matter whether the market went a little higher afterward or not. Too much good news, tremendous volume of transactions at the Exchange, and universal bullish enthusiasm mark the culmination of a bull movement.

When prices can be put up no farther, rely upon it, that the operators are getting ready to put them down. No matter whether such a proceeding is harmful to business interests, no matter whether it actually brings on a great crisis, the writer is only stating the fact. A market which is going up no farther is certainly going down; and the speculators combine to carry the decline as far as possible, in order to reap a harvest of profits on the short side of the market.

When a bear campaign begins, traders go short of stocks. To do this to advantage, they are obliged to sustain prices for a time, while selling more than they buy.

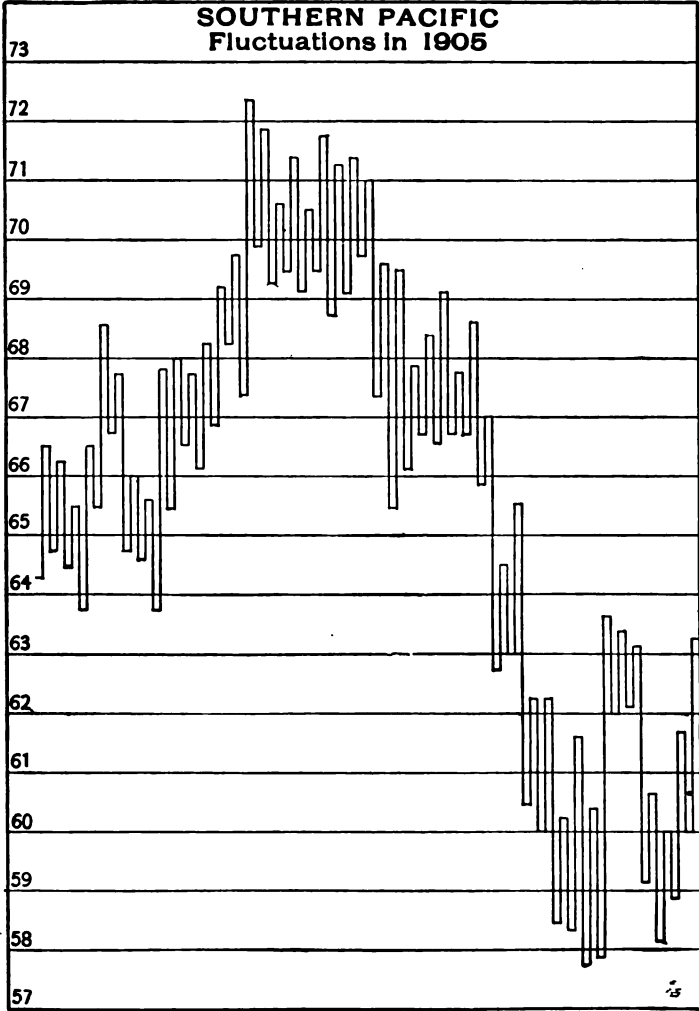
One of the conspicuous tests of a successful operator is the ability to sell, while apparently buying. It may seem incredible that this can be done, yet it is an every day performance. "Washed sales" or "matched orders" are one of the agencies, through which the object is attained. Orders are telephoned simultaneously to several

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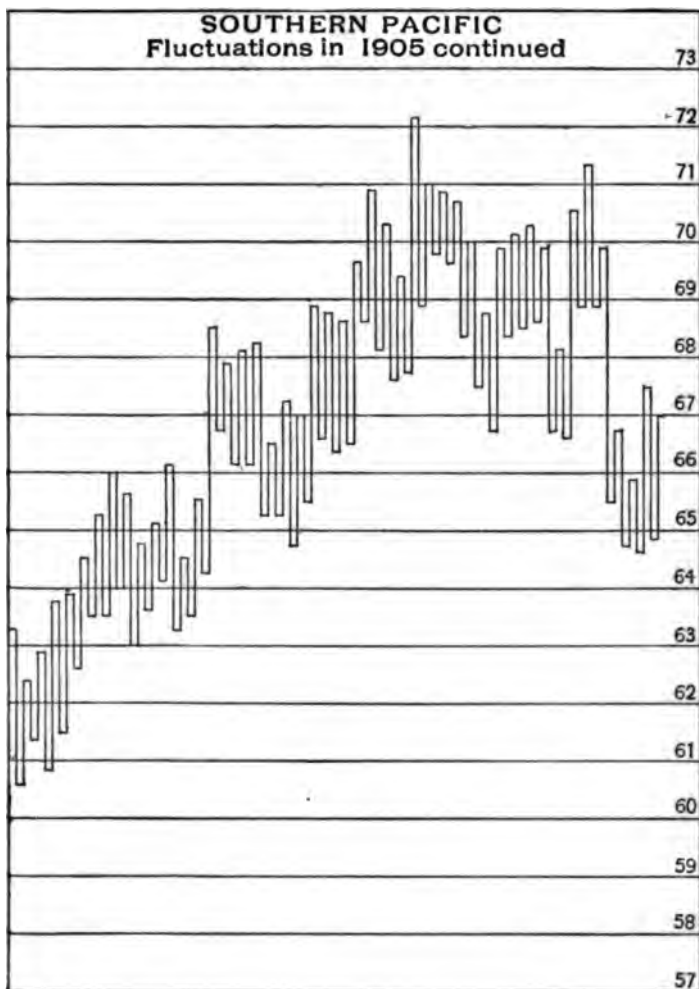
brokers. Some of them are directed to sell, others to buy. Each broker rushes to the post and executes his order, none of them aware of the orders of the others or that they all emanate from the same source. If his work is skillfully done, the operator ends each day in an improved position, having sold more than he bought, and the public no wiser or actually mystified. They may not do these things in Utopia. But this is the United States. Not long ago, it required washed sales of 300,000 shares to get rid of 30,000 Southern Railway stock near the top of the market.

While the insiders are getting out of stocks and going short at the top of the market, it is usual for a few selected stocks to be bulled to much higher figures, to attract attention and conceal the real designs of the big speculators. In 1903, just before the great break began, heavy advances took place in Delaware & Hudson, Southern Pacific, General Electric, Missouri Pacific and People's Gas. Meanwhile, the professionals were all getting short of their favorite stocks.

At the proper moment, all operations for the rise come to an end. Lacking their former support, prices commence slowly to fade away. Slow and feeble rallies are succeeded by rapid dips, in which prices go a little lower than before. When the decline has imperiled the ten point margins of stubborn and skeptical traders, more margin is called for by the brokers with the inevitable result that a quantity of stock is thrown overboard. A quick slump is the consequence. In due time, heavier selling breaks out and the bear market is under full headway. Finally, the twenty point margins are exhausted, more stocks are thrown over regardless of price, and there



**SOUTHERN PACIFIC**  
**Fluctuations in 1905 continued**



is another smash. Every outburst of liquidation carries the market farther down. From time to time, traders who are short cover their commitments and there is a smart but short-lived rally. On these rallies, the pools sell more stock. One terrifying break succeeds another, until, after months of confusion and loss, the bear market culminates and prices are again at the end of their swing.

At the psychological moment, the strong come forward again, take hold and support the market by their purchases and the whole story is repeated.

It is the periods of accumulation and distribution, each one covering several months, which an investor must watch for. He will be aided by close attention to underlying conditions and by the comments of conservative newspapers and bankers. An investor will lose nothing by training his mind to a habit of cynicism. In the famous Joe Millerism, the courtier was warned not to believe all he heard at the French court. An investor must not believe all he hears in Wall Street. He must look at the future and judge whether the times ahead are favorable to stocks or the contrary. Wall Street always discounts the future. This he must learn to do also.

A clue to turning points in the market is sometimes afforded by charts. An investor is advised not to make a fetish of charts, as so many small traders do in Wall Street. It would be absurd to suppose that the whole meaning of the market can be read in charts. On the other hand, they are a graphic representation of what stocks are doing; and they show at a glance whether a given stock is cheap or high. An investor can obtain the material with which to make a chart, by taking a newspaper which prints a detailed list of all the sales, each

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day, on the New York stock exchange. The chart should be kept in the form of the sample one hereto appended.

A chart shows where a stock stands at any stage of the movement then in progress. If it is high, that is not necessarily a sign that it will not go higher. If it is low, it may go lower yet. But periods of accumulation and distribution are generally indicated. A number of swings and turns at the top of a long rise, and especially a strong dip downward and a rally back to about the same high figures again, are held to signify distribution. At the bottom, which is commonly better defined than the top, a number of movements back and forth, with a rally of several points and a return to about the lowest figures, is a sign, as a rule, that accumulation is going on and that in due time a strong rise will follow.

Those who pin their faith entirely to charts believe that "double tops" and "double bottoms" are the thing to look for. There is something in this; but it will not do to rely absolutely upon the pools and operators showing their hand too plainly through the charts. The main point is, that when a high top is made, followed by a decline, and the market rallies back to the top and refuses to go through, then that is proof that too much stock is for sale there and distribution is evident. At the bottom, when a return to low figures has taken place and the stock refuses to go much if any lower, then buying is indicated. The chart must be looked at broadly and must be considered with reference to underlying conditions and the general situation.

Ruled paper can be bought in stores where mathematical supplies are kept, especially for the keeping of charts.

## XI

### DULL DAYS IN STOCKS

THEIR MEANING AND WHAT THEY PORTEND—A FEW NOTEWORTHY

#### EXAMPLES

**A** PHENOMENON which is witnessed in Wall Street, at intervals, and which is full of significance, is the recurrence of exceptionally dull periods in the trading.

From time to time, there happens a week or a month, during which the market wends its slow way along as sluggishly as a muddy brook crosses a flat, when traders are tired beyond expression, and the public seem to have lost all interest in securities of every description.

Few of the real phenomena of the Street are without meaning; and to veterans, these dull periods are highly significant.

They are not to be confounded with the mid-Summer and mid-Winter halts in the market. Trading is usually at a low ebb, twice a year, on the first occasion because of the vacation absences of a throng of traders and operators, and in December, owing to the distractions of the holidays. The phenomenally dull periods may coincide with one or the other of these halts, now and then; but what we are considering here is something different from the normal mid-Summer and mid-Winter dull days.

Citing the unusual periods, first, it may be said that



intense dullness in the stock market has preceded a serious break in prices, twice during the last fifteen years.

In 1890, a prosperous and fortunate year in the early months, few clouds were visible on the financial horizon, except in the always troubled region of politics. The usual January rise and reaction had been followed by a good Spring rally, running into May. July was duller than common. The Silver Purchase act was under discussion and became a law in that month. Many traders in stocks had an idea that what the farmers believed might be true, that inflation of the currency would boom prices of stocks and commodities both. There was a pause to consider the situation. In July, sales at the New York stock exchange fell to an average of only 83,400 shares a day. Conservative men feared the consequences of the silver law and stopped buying. Farther, the crops were not in good shape, owing to dry weather. The hesitation in the market foreran a fall. Europe was disturbed by our silver legislation and had troubles of its own besides. When prices began to move, they fell; and with the exception of an extremely mild rally in August, an almost unbroken decline took place, lasting the remainder of the year and ending in a violent smash. Intense dullness in 1890, therefore, signified an alteration in underlying conditions for the worse and foreshadowed a bear market.

Another such instance was the extraordinary dullness in the Spring and Summer of 1896. After the Spring rally, the market fell into the doldrums. May 27th of that year is often referred to as almost a record day of only 65,700 shares. Prices had come up nicely from the low figures of 1895; but 1896 was a terrible year and any hesitation in the upward movement was an unfavorable

feature. Apathy for a month or more, at a season when the market is normally active, was succeeded by a heavy drop in prices; and the great break of August carried the level of the market down to the lowest point, known to the present generation of active men. To all appearances that low level will never be seen again, unless in consequence of some catastrophe in national affairs not now dreamed of.

These two cases are the only ones of importance within fifteen years, in which an entire paralysis of the trading was the forerunner of a serious decline in prices.

As a rule, intense dullness precedes a strong movement upward, no matter at what level the market is standing.

In 1891, 1893 and 1894, the notable periods of stagnation coincided with the Summer vacation period. Condition of the crops played no certain part in the dullness of those months. Crops were excellent in 1891, poor in 1893, and good in 1894. July was practically, in each of those years, the lowest point so far as prices were concerned. In the week ending June 30, 1894, sales did not go above 576,000 shares, making it probably the dull-est full week of the present generation. On July 3d, sales were 60,200 shares. What that meant to brokerage offices may easily be imagined. Seats on the stock exchange suffered in value and pessimism was so rampant that many brokers thought their seats would be useful thereafter only as heirlooms. In each of the years named, the stagnation was far greater than was normal. It indicated definitely an end of liquidation, and was the precursor of booms in prices, which started when activity returned and gained momentum later.

In 1895, the smallest volume of transactions was in

January and February. Sales averaged about 120,000 shares a day. Utter and hopeless inertia settled down upon the market. No broker earned his salt. This was, however, the end of a seven months' decline, liquidation was over, the situation had cleared up, and, with trifling reactions, prices rose then until September.

In 1900, when the average of railroad stocks was higher than at any time for ten years (except for a few weeks in 1892 and 1899), the month of August was excessively dull. Drouth had affected the wheat crop and the allied armies were besieging Peking. Aug. 22d sales amounted only to 86,000 shares. The average for the month was about 150,000 shares a day. On the worst six days, trading reached a total of only 672,000 shares. The intense dullness of August meant that, after a run of twelve months, liquidation had completed its course. Stocks were in strong hands. Important interests were maturing plans for a bull market; and, after a short and sharp shake-out, there followed a steadily rising market until the May panic of 1901. This was a typical case of the usual sequence of great dullness in the stock market.

In the exciting bull market of 1902, the dull month was June. In one week, sales did not go above 1,325,000 shares. The public were being subjected to the tiring out process. The bull party had a tight rein on prices; and men who were shrewd enough to put the proper interpretation on the phenomenal dullness of June were lifted to wealth before the frosts came. June was the month just before the great upheaval in prices of good railroad stocks to prices three and four times greater than the figures at which they sold in 1896.

March 10, 1904, was the smallest day in eight years.

The smash of 1903 was ended. A fine rally into January had taken place and then prices drooped nearly to the low level of 1903. Prices held their own but there was no buying. During the last week of April, only 1,070,000 shares were dealt in. June 28th, sales of 87,900 shares only were reported. As a matter of fact, March was the turning point in the market. Liquidation had ended. The Northern Securities case had been decided (against the Union Pacific interests) and the bad news did not depress the market farther. A realizing sense of the situation finally dawned on the bear party, which hastened to cover its short sales. A new era of higher prices dawned on Wall Street; and since then, the market has risen to the highest point ever known, exceeding the high average of 1864.

Phenomenal dullness reigned in Wall Street in June, 1905. A good reaction had occurred in May and prices had started upward again. Such persons as had not sold their long stock during the previous break were tired out, as far as possible, by a dullness and apathy which seemed to presage another fall. During the week ending June 17th, total sales on the New York exchange amounted only to 1,800,000 shares or so, little more than one full day's business in times of active manipulation. On the 15th, 129,000 shares were done. Drowsiness fell upon the market, the stock ticker, and all things animate in Wall Street. On the 17th, Saturday, 83,000 shares were dealt in. Since then we have had over a million shares on a Saturday. On the 17th, St. Paul changed in price just  $\frac{1}{8}$ th of a point; Union Pacific,  $\frac{1}{4}$ th; and United States Steel, preferred,  $\frac{3}{8}$ ths—all magnificent stocks whose enormous volume on an active day is a feature of the furious

trading. That was the record for dullness. There could be nothing worse than that. There never was anything worse except perhaps on March 12, 1888, the famous day of the blizzard, when practically no business was done on the exchange, sales being only 15,250 shares. The stagnation of June, 1905, meant, what it usually does, a strong movement upward as soon as activity returned.

Enough has been said to show the importance of watching for periods of remarkable dullness in the stock market. They form turning points. It is imperative at such times to search closely into underlying conditions. If those conditions are sound, a great rise is ahead. If they are dangerous, there may be a flicker upward just after the resumption of active trading, but the market is bound toward a lower level.

It may be remarked, incidentally, that the top of a bull market is commonly attended with great excitement in the trading, an enormous volume of sales, and wild and erratic movements in prices.

With reference to intervals of dullness in the trading, it may also be said that the same phenomenon is watched for, each day, by those who wish to profit by small turns in prices. If, on a rally, active trading stops or falls dull for an hour or more, that is generally held to signify a coming turn downward of a few points. Per contra, if trading falls dull, after a break, and prices refuse to go any lower, those who are short cover at once and play for an upward turn.

## XII

### WHEN TO BUY SECURITIES

DOCTRINE OF FIVE-YEAR AVERAGES.—REACTIONS HALF-WAY BACK.—  
RULES FOR BUYING ARRANGED AND CODIFIED

**I**T is taken for granted, that an investor has sold some, or all, of his stocks at high prices during a boom, and wishes to recover them lower down, or that he has come into the possession of surplus funds, which he wishes to invest safely and profitably.

It is also presumed that he will confine his attention to standard, respectable and long established securities, which will afford him a regular income; and that he knows what they have sold for in recent years, their rates of dividend, earnings and surplus profits, and in a general way the financial standing of the companies in other respects. All this is fundamental.

To determine for one's self the proper time to invest in securities requires a study of the matters outlined on the previous pages of this book, the lessons to be learned from which will now be set forth, even at the risk of a little repetition.

An investor should seldom be in a hurry. By waiting a few months or even a year, and by proceeding in a perfectly cool and matter of fact way, he will sometimes buy a favorite stock many dollars a share cheaper than the prices ruling at the moment. Safety of capital can

only be assured by buying stocks when they are cheap and when there is a prospect of higher prices for them. This cannot be insisted upon too strongly. In any event, one will often save the equivalent of more than a year's dividends by patient delay; and a man who cannot wait for a decline has no business to put his money into stocks. If, in addition to safety, one wishes to add an actual increment to his principal, he must certainly buy when the market is down and not during the whirl of a furious bull market. While awaiting his opportunity, an investor might amuse himself by making a chart of the fluctuations of the stock he has particularly in view, covering a period of a year or more back.

To clear away one misconception, at the start, allusion may be made to the doctrine, entertained by some, that a stock is to be bought when it has fallen to, or below, its average price for the last five years. Such a rule is well enough, but it would give an investor few opportunities. If that plan had been followed in 1905, for example, one might have tried to buy some one or more of the excellent stocks, named below, at the prices set opposite:

Am. Car & Foundry, pfd. \$ 78	Lake Shore.....	\$284
Amer. Locomotive, pfd.. 88	Louis. & Nash.....	108
American Sugar..... 127	Manhattan .....	131
Atchison .....	*Mo. Pacific.....	102
Baltimore & Ohio..... 90	Nat'l Biscuit, pfd.....	100
Canadian Pacific..... 114	*N. Y. Central.....	142
Central, of N. J. .... 167	N. Y., Ch. & St. L., 1st pfd.	107
Chic., Mil. & St. Paul.... 157	*Pennsylvania .....	141
C. C. C. & St. L..... 83	Union Pacific .....	97
Delaware & Hudson..... 154	U. S. Steel, pfd.....	79
Illinois Central..... 139	Western Union.....	88

Only three of the stocks named, those marked with an asterisk, fell as low in 1905 as the prices given; and indeed few others fell in that period to their five-year average. Obviously, this method of judging when to buy would have had little practical value in 1905.

It would have answered, during certain periods after the Civil War and in the '80s and '90s. In 1903 and 1904, the plan would have been good enough, because there had been great depression, with heavy drives at prices; but other considerations would have dictated buying then and they would have been convincing and sufficient. On the whole, it is so seldom that the five-year average can be depended on as a guide that its practical value is almost nil.

With reference to bonds, the five-year average may apply; but even in that case, this is not the rule to govern.

In other lands, where conditions may be stationary, the five-year-average plan may answer in any given year. Some other guide must be sought for in a region like the United States, where underlying forces are lifting the whole body of good stocks to higher and yet higher levels as time rolls on and the country is working out its manifest destiny.

There is one contingency in which the doctrine of average price may be acted upon. When a stock has risen rapidly from a previously low level, it is apt to react nearly or quite half-way before resuming the upward swing. The phenomenon is seen more distinctly in the speculative and highly manipulated stocks. A case in point was afforded by Tennessee Coal & Iron, which rose from around \$32 in May, 1904, to \$106 in



April, 1905, an advance of about \$74 a share. A month later, the price had reacted on profit-taking to \$73, a drop of \$33 a share or about half the rise. Reactions half-way back are often seen in the foot-balls of speculation in Wall Street; and instances of the tendency are shown in the chart of Southern Pacific on another page. An investor who has become convinced that a long period of prosperity lies ahead, that the bull market will run on for some time, and that a stock is worth the price it is selling at, can frequently buy his favorite to advantage on these half-way-back reactions, if he has missed his opportunity at the bottom.

The best guides for buying are based on common sense, a knowledge of underlying conditions, and a clear understanding of the present situation of the market with reference to the last crisis or period of depression.

Assume, first, that good times are returning after a long term of depression. The upward movement may have just begun. Is money accumulating in the banks? Are rates of interest less than 4 per cent? Have there been failures, a great decline in stocks, smash after smash in the stock market, and do standard stocks sell at prices which would return more than 4 per cent on the money invested, perhaps 5, perhaps 6 per cent? Can an investor gather from such sources of information as are open to him an idea that liquidation in stocks has virtually ended? In a year of this character, the time to buy is during a strong drive in prices in the months from July to October. In every year of depression since 1860, bottom has been reached some time between July and October. In those years, stocks may have seemed amazingly cheap, all things considered, in the Spring, but experience

shows that they have always been cheaper yet in the Fall. No iron-clad rule can be laid down, as to whether it is preferable to buy in July or the Fall in these years of prostration. No investor can dispense with the exercise of judgment in every action on the subject of stocks. But if he keeps his eyes on the banking situation, he cannot go far astray in deciding whether to buy in July or at some later date. It may be said, however, that purchases as early as July in a year of desperate depression, after one or two years of the downward swing, are generally safe enough for all practical purposes. An investor is then merely taking back good stocks, previously sold at much higher prices; and if they go somewhat lower in the Fall, no harm can come to him, provided that the trend of the times is toward betterment.

But suppose that an investor did not recover his stocks at or near the bottom of prices in a year of great depression! Suppose that the bull movement has made some progress upward, when he comes into the money which he wants to invest, and that prices are higher than they were! What then? If conditions remain good, if money is easy, the banks have ample resources, times continue to brighten, and prosperity looms large for months or years ahead, then the best time to buy is at the bottom of the normal yearly swings in prices. June or July, after a considerable drop in prices, or later in September or October, is the time to buy.

In a general way, a good rule in years of reaction is to buy when things look absolutely the worst, when men who hang all day over a stock ticker feel sure that some catastrophe is impending they know not what, and that prices are going lower yet. The inexperienced part of

the public always sells at such a time as that; and an investor can get any stock he wants without bidding up the price to do so. A man must have some confidence in the future of his country and its inexhaustible spirit of enterprise and its resources.

A panic in an improving year always brings a bargain day, sooner or later. If one is not quick enough to buy on the day of the great smash, he can commonly do so to advantage a few days later, because, while there is invariably an excited rally immediately after a panic, a second decline nearly if not quite to the low level reached before has always heretofore taken place. On a great break, stocks are always bought in quantity by prominent financial interests to support the market and prevent it from going to pieces entirely; and when order has been measurably restored, these stocks are sold, and during the selling there is another recession.

During a great boom in business and stocks, millions of money are dispersed for dividends and interest, every month. It frequently happens that an investor has idle funds at such a time. What shall he do? He is exactly the man, for whom, in the parlance of the Street, the pools and operators are "gunning." The air will be found full of reasons why he should not delay but invest at once. Those who have stocks to sell want his money and they will put forth every effort to induce him to buy at high prices. This is the most dangerous and difficult time for an investor. He must ask himself: Are stocks selling above investment worth? Has the boom been in progress several years? Have money supplies been diminished by the activity of business and by stock market operations, until loans are more than deposits,

or until surplus deposits are nearly at zero? Are interest rates high? What is the state of foreign trade? Does disturbing legislation threaten? Have there been exposures of fraud or wrong-doing? On a calm and dispassionate review of these, and all other, elements of the financial situation, are there present a majority of the circumstances which always forerun a crisis and a reaction in trade? To all appearances, the sky may be clear, no clouds or distant mutterings may indicate an approaching storm, every favorable factor may be treated lightly by the press (which, from principle, not at all from mercenary considerations, prefers never to alarm the investing public), unbounded enthusiasm may prevail among acquaintances, and rumors may abound of yet higher prices for stocks. This is precisely the time not to buy. In a few instances, stocks may rise higher. An investor may feel, for the moment, that he has lost an opportunity in some of them. He will do well, however, to wait with a perfectly calm mind for the rising tide to halt and then to ebb furiously in the manner characteristic of periods of crisis and reaction. He will buy only when the reaction has run its course, as nearly as can be judged.

It is seldom worth while to buy an active stock immediately after a dividend has been increased. The temptation to go in at once is almost irresistible, especially if the stock at once starts upward. One may rely upon it, that the insiders and their friends have had advance information of the good thing coming and have been buying the stock when it was low, in order to sell out later. Good news, such as this, is certain to be followed by at least a moderate reaction. That is the time to buy.

Those who have ample funds, a portion of which they are willing to risk in the purchase of non-dividend-paying stocks, often devote some attention to bankrupt companies, which are about to be organized. A great deal of money has been made in such stocks. One needs only to compare the present value of Northern Pacific, Reading, Erie, Union Pacific and other stocks of that class, to realize the profits which have been made by courageous buyers, who accumulated some of those securities when they could be had for a song. No doubt, years of waiting followed, but sterling companies were sure to shake themselves free from their difficulties in time. In the rearrangement of the finances of a bankrupt company, it is not uncommon to levy an assessment of \$1 to \$5 a share, or more, on the stock. An investor will wait until the plan of reorganization is published. He will then know exactly what he has to face. Many holders will sell rather than pay the assessment; and it seldom fails to come to pass, that a buyer can secure the stock at as low a price as before and sometimes lower. There will be little harm in waiting until he can buy stock, on which all the assessments have been paid.

To summarize the whole matter, and to codify the rules for buying as far as practicable:

1.—In years of trade depression and reactions in stocks, buy only in the late Summer or Fall, on some strong drive at prices, and when a stock has fallen to, or below, actual investment worth.

2.—In years of good business, if the market has not risen for more than one year, buy on strong reactions in the Summer or Fall months, and especially if the market has been extremely dull for several days or weeks.

3.—In a good year, buy during a panic or the second drop of prices, after recovery has begun.

4.—After a dividend has been raised, buy after the next strong reaction.

5.—After a stock has long been inactive and when the price is low, buy when transactions become large and the price begins to rise.

6.—Do not buy after a long or sudden rise, especially if the price has risen above investment value.

7.—If a stock is not above investment value, buy, after a sudden rise, when the stock has reacted half-way back.

8.—Do not buy a stock, whose earnings have been barely able to meet fixed charges and dividends, if an intention is made manifest to expand the capital or bonded debt considerably.

9.—Buy the stock of a company about to be reorganized only after the plan of reorganization has been made known.

### XIII

#### WHEN TO SELL SECURITIES.

TOP OF THE MARKET NOT SO DEFINITE AS THE BOTTOM.—BOOMS AND THEIR ENDING.—STOP ORDERS.—A FEW NOTEWORTHY INSTANCES

**I**N Wall Street, among the men who trade actively in stocks, in order to catch the twists and turns in prices, from week to week, it is not uncommon to find individuals, who have a genius for buying at the exact psychological moment, but who tend to overstay and frequently let the profits of to-day run into losses to-morrow. There are others, whose insight as to the proper time to sell is marvelous, but who lack the faculty of buying at the right juncture. It is possible to train the mind so as to act with reasonable discretion in both cases.

With reference to selling, a general rule, which has stood the test of time, is to let go of stocks, when they are above investment worth, when there is excited buying by the general public or by traders who are short of stocks, when the volume of transactions is unusually large, and when those periods coincide approximately with the logical culmination of a normal yearly movement in prices, especially if the rise has been in progress for several years. The rule seems simplicity itself. In practice, it is difficult to follow, owing, to speak plainly, to the credulity and cupidity of human nature.

It is presumed that an investor has bought good stocks

during a period of depression or reaction, and that, by patient waiting through good and evil days, he has seen \$15, \$25, or more, added to the value of each share he holds, and that he has meanwhile received one or more dividends on the stocks. Trading at the stock exchange may be fast and furious. Enthusiasm prevails on every side. Sales have run up to an aggregate of one or two million shares a day. The time may be at hand for the top of a normal yearly swing in stocks. At this juncture, an investor will free his mind entirely from the tips and rumors of Wall Street and consider, in the most matter-of-fact way, how much higher, if any, the market is likely to go.

It is important to watch for the phenomena of the top of a bull movement, elsewhere referred to. In its origin, a bull market is as much the product of natural forces, as are the plants, the leaves and flowers, which cover the face of nature in the Spring; and the growth of prices resembles the slow progress of the crops, in that the movement is exposed to accidents and must be carefully aided by the art of man. But there is a vast difference in the circumstances which attend the harvest. On the farms and plantations, the husbandman can sedately pluck the fruits, reap the ripened grain, and harvest the sugar cane and cotton, with full knowledge that the time has come and that delay will ensure the blighting of all his hopes by the inevitable and bitter frosts of Winter. The signs that the harvest time has come are not so obvious at the end of a bull movement in stocks. They never are as clear at the top as at the bottom of the market.

An investor must always be attentive, but need not be



in undue haste. He must consider, first of all, whether the swing upward is likely to last for years, as it did after 1861, 1865, 1877, 1884, and 1896. He must decide how much is left of the usual four- or five-year swing upward. He must also determine whether he will wait for the end of the long swing or take advantage of the normal yearly turn. It is probably safer to pursue the latter course, because an investor will then remain a closer student of conditions; and he will be safer against accidents, war scares, crop shortages, the death of prominent magnates in the financial world, and unexpected exposures of rascality or failures of institutions.

As elsewhere narrated, at the top of a bull movement, the great operators and pools must create a public following to which to sell their stocks at good prices. The manner in which they do this has already been told. The point is, that, when the market is being made to look the strongest, forces may be mustering which are certain to bring about a reaction or a long decline.

A cool-headed investor will reason over the matter with entire sang froid. Suppose that Union Pacific had been bought in 1904 around \$75. In November of the same year, the stock had risen to \$117, then the highest price on record. An advance of \$42 a share must have proved, and to many did prove, a strong temptation to sell. But the company had paid 4 per cent for years; and its earnings had grown finally to around 10 per cent in excess of fixed charges, as appeared from its financial reports. It was as certain as anything could humanly be, that the moderate rate of 4 per cent would in time give place to a larger annual distribution on the stock. The times were improving. No signs of trouble were visible in the finan-

cial outlook. Surplus deposits were large and money in ample supply. The usual January or Spring rise was just ahead; and it could have safely been taken for granted that nothing would be lost by waiting until that time. In February, 1905, there was a week of excited trading at the New York Stock Exchange, with total sales of almost 2,000,000 shares a day. During that swirl upward, Union Pacific was rushed to \$138 a share. At that price an investor would get less than 3 per cent on his investment. That was the time to sell. A few months later one could have repurchased \$20 a share lower. On the increase of the dividend to 10 per cent Union Pacific has since risen above \$180.

Take another instance! Suppose that an investor had bought United States Steel, preferred, early in 1904, around \$55, having become convinced that the Corporation was able, and resolved, to maintain the 7 per cent dividend. By October the stock had risen nearly to \$85. A quarterly report is issued by the Steel officials, and from this, it could have been learned that profits were steadily expanding and that the trade had entered upon a period of genuine prosperity. The facts would have justified the belief that Steel, preferred, would ultimately rise to par or higher. A sound industrial, tried by the storms of depression and reaction and paying 7 per cent regularly, should be worth from \$100 to \$120 and upward. Until the security in question should have approached the higher figure, then, no important reason would have appeared for selling. Had an investor sold during the excited market of February, 1905, he could have realized around \$96 for his stock and would have added the handsome sum of over \$40 a share to his principal. He might

have bought again, next month, a few dollars a share cheaper; but the prospect of this was small; and the investor might have safely waited for the quotation which the stock seemed destined to reach at a not distant date. At the top of the Spring rise in 1905 it went nearly to \$105. This figure coincided with the culmination of a normal yearly swing; and that was the time to sell. Steel, preferred, reacted nearly to \$90 during the dull Summer months of 1905 and has since been sold at \$113.

A typical instance of the proper time to sell was supplied by St. Paul in 1902. Purchases could have been made around \$150 several times in the first three months of 1901; and on one occasion it sold as high as \$186. As a 6 per cent investment stock, at \$186, St. Paul would have yielded about  $3\frac{1}{2}$  per cent on the purchase price. Scores of investors sold their holdings then and repurchased, the same year, \$30 a share lower. By September, 1902, St. Paul had been bulled to \$198 $\frac{3}{4}$ . It had been "tipped" for \$200 and came near enough to that figure for all practical purposes. The market then hesitated. The stock was about to be placed on a 7 per cent basis; but around \$200, even then, the stock would have paid only  $3\frac{1}{2}$  per cent on the purchase price. At the critical moment, in order to support the stock and enable the pool to market its later purchases without a loss, the Street was filled with rumors that St. Paul was going to \$220. A few rash speculators may have bought at the prices then ruling; but at \$220 St. Paul would have paid less than  $3\frac{1}{4}$  per cent. Money was worth more than that then. Surplus deposits of the New York banks were almost exhausted. Interest rates were high. Every underlying condition pointed to a coming crisis and reaction.

Credit was badly strained. Buyers at Spring prices had more than \$30 a share profit and this would have paid the 7 per cent dividend for four years. Conservative investors sold without more ado. St. Paul never went even to \$200, much less \$220; and it entered upon a downward swing and its fall was never seriously interrupted until September, 1903, when it sold around \$134 a share. Those who did not act promptly and get out in September, 1902, had an opportunity to do so around \$180 to \$183 in the January rise of 1903.

It is always harder to decide when to sell than when to buy. At the height of a bull movement current gossip tends to blunt the perceptions as to the foundations on which the market rests. The hysterics which prevail at the bottom of a bear market, or in a hotel fire, or when the steamer is in trouble at sea, are as hard to contend with as the contagious enthusiasm which rules when a bull market is fast and furious. Hotel lobbies and the newspapers are full of tales, most of them grossly exaggerated, in which all sorts of people, including actresses, head waiters, valets and clerks, are reported to have made fortunes in the stock market and to have gone in again on various stocks named. Cynicism is the best ally at such times. A careful man will disentangle himself bluntly from all outside influences; and if any of the stocks which he holds are in truth going higher, he will "let the other fellow" make the money and will sell him the stocks to do it with. He should then leave the market, stay out entirely, and wait for the normal downward swing which is sure to follow. He can afford to devote himself to private affairs for a few months before committing himself again.

A practice which will be found useful to many who cannot, or do not intend to, pay close attention to market vagaries, or who expect to be absent, is the employment of so-called "stop-loss orders"—stop orders, for short. These are a protection against sudden panics and unexpected reactions.

The theory of stop orders is based on a number of considerations, among them being the tendency, already referred to, of stocks to react half-way back after a strong rise or fall. No greater decline than half-way is likely ever to take place, unless a bull movement has definitely ended; and conversely, no greater rally than that may be expected, unless the market has finally turned upward for good.

An investor who makes use of a stop order would wait until there had been a good rise, say \$15 a share. To take a concrete instance, say from \$80 to \$95. He would then order his broker to "sell the stock at \$88 stop." That is half-way back. As the rise goes on, he will raise the stop order, placing the point for a sale half-way back from highest quotations. All this will not prevent him from selling at any time, and any price, he chooses; but it will ensure at least a part of his profits in case of a sudden panic like that of May, 1901, or any other severe reaction while he is away or inattentive.

A useful fact to bear in mind is this, that, in bull markets, the highest prices of any given year are made either in January or April, on the one hand, or in the Fall. In a bear market, and during a trade reaction, they are made in January or February.

To summarize, a few rules will serve as an approximate guide as to the time to sell.

1.—In any event, sell, when every underlying condition of finance points to an approaching crisis and depression.

2.—Sell, when the price is above investment value, on any sudden rise, or at the top approximately of a normal yearly swing.

3.—Sell, in January or February, when surplus deposits have fallen near to or below zero, when interest rates are high, and when the slackening of trade can no longer be disguised.

4.—Sell, as a normal yearly movement in prices reaches its usual period of culmination, if you expect to repurchase after a fair reaction.

5.—Never sell a stock which has been carried through a long and sustained decline, when it is at absurdly low figures.

6.—Never sell on news of a strike among the workmen of the corporation, unless the stock is above investment worth, and then you should sell anyhow.

7.—Never sell during a panic, in a bull market, except on a stop order, but hold on until the rally, and then judge dispassionately.

8.—Never sell a good stock on mere market rumors. They are too often set afloat to mislead.

9.—Finally, do not be discontented if your stock does not bring the very highest price which has been paid for it. The highest prices seldom last for more than a few minutes and cannot be realized by a person away from Wall Street and by few in it.

## XIV

### MAXIMS OF WALL STREET

**A** GOOD investment is a good speculation.  
Actual value will tell in the end.

No man ever makes himself poor by taking profits.

All stocks move, more or less, with the general market.

After a period of great dullness, the start upward is always due to some special event or to manipulation.

Buy when everything looks the blackest and when every one else wants to sell.

Securities can usually be bought at less than their real value during a sudden scare or panic.

Wait patiently for the proper moment; and never buy or sell simply for the sake of doing something.

“The first requirement of success in Wall Street is patience.”—*Jay Gould*.

If you do not see the way clear, do nothing.

Sell when securities are high, especially if the price is above the investment value.

Manipulation, which does not bring public coöperation, always ends in reaction.

A manipulator may be all-powerful for the moment; but only for the moment unless conditions are with him.

In a general decline, merit in a particular stock does not count for the time being.

The market will be here to-morrow.

ing the timing of the opportunity.

No grist can be ground with water which the mill.

Look before you leap; but he who neve makes.

The public usually buys at the top and bottom.

Prices always look strongest at the top an the bottom.

“The man who is right six times out of t his fortune.”—*James R. Keene.*

Those who can give good advice are least a

Make up your mind how much profit ca be expected; when your figure is reached, *not go in again* until after a strong reaction.

Speculation begins where certainty ends.

Caution is the father of security.

If you go into Wall Street to make your will probably not even make your living. there to make your living, you may make yo *S. V. White.*

Buy privately, but you may sell publicly i

In buying stocks, select those whose ea and thus their actual value, is above the pri



If you intend to sell on the next rise, buy only those securities which have a broad and free market.

Be silent when a fool talks.

Never sell stocks on account of a strike.—*Addison Cammack.*

Do not try for the exact top, or bottom, of the market, because you are liable to overstay.

Small losses often prove great gains.

Do not sell a security, which has long been inactive, just as it begins to move.

Follow a strong movement with a stop loss order a few points down.

Dullness after a protracted decline usually foreshadows a rise.

The right time to buy (Amalgamated Copper) is between ten a. m. and three p. m.—*H. H. Rogers.*

Do not plunge recklessly after one or more successful trades.

It seldom pays to be stubborn.

If industrials work lower, a reaction in trade is denoted. This ensures a smaller tonnage for railroads and a fall in railroad stocks.

Little and often fills the purse.

The market does not change its main direction suddenly.

Never sell stocks short in the Spring, when the sap is running up the trees.—*Daniel Drew.*

Never ask a leader of the market what he is doing; the question would be impertinent.

An investor can do nothing to make prices, but he can take advantage of them.

Express no careless opinions about securities; no one

can tell what harm an unthinking word may do.—*Jacob Field.*

If a market receives a sudden shock, remember that the worse and more violent the break, the more rapid the recovery.

Great financiers never oppose general conditions, but they sell or buy according to their judgment as to the state of affairs, which will prevail months and even years ahead.

When everybody is bearish, buy. When everybody is bullish, sell.

Never tell what you are going to do until after you have done it.—*Commodore Vanderbilt.*

When some one gives you a tip, do not act at once. Take time. Think it over. Secure the fullest information. Then act.—*Louis V. Bell.*

Panics come out of a clear sky like violent storms.

No profit is secure until the stock is sold.

If prices are high, then whoever looks for higher prices yet must have sound reason to expect a betterment in earnings or general conditions.

New York is a world's market and whatever promotes or unsettles confidence abroad is reflected here at once.

A bull market is possible with high money.

During a storm it is sometimes best to stay at home.

In a bull market never sell out at a loss stock which has been bought during a bad break.

The fiercest bear is a bull who has sold out too soon.

The market will always do well enough as long as earnings keep up and money is easy.—*J. P. Morgan.*

Buy when every one is selling. Sell when every one is buying.—*Rothschild.*

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**Prices do not respond to conditions, they respond only to manipulation.—The motto of cynics.**

**What goes up must come down.**

**If you have planned for large profits, never take small ones.**

## XV

### FINANCIAL TERMS AND PHRASES

A FEW OF THE TECHNICAL TERMS IN USE IN FINANCIAL CIRCLES  
DEFINED FOR THE BENEFIT OF THE GENERAL READER

**Account.**—More in use in London than here. In England stocks are seldom paid for at once, but are settled for fortnightly. Two days are set apart, twice a month, for the settlement of contracts in stocks. To “buy for account” means that they are to be paid for at the next fortnightly settlement.

**Adjustment Bonds.**—Bonds issued for the adjustment of the finances of a company. They are a lien on any new property, not covered by previous bond issues, and, with reference to other property, they take their place after already existing liens.

**Arbitrage.**—The buying of stocks in one market, where they are low, and the sale of them in another, where they are higher. Or the reverse. The profit is usually small and results from quick turns in the stocks. A class of arbitrageurs on the New York stock exchange devote themselves to arbitrage transactions between that city and London.

**Averaging.**—To buy every half point or so down, in a

falling market, or to sell short on a similar scale up, in a rising market. The object is to make total transactions average a satisfactory and safe figure.

**Bear.**—A bear on stocks is a man who believes that the market will go down, who therefore sells short in order to buy back at a profit, and whose operations, if he is a manipulator, tend to aid the fall in prices.

**Bill of Exchange.**—A draft, or written order, for the payment of money, issued usually against a shipment of goods, the draft to be paid at the point to which the shipment is made. The term, bill of exchange, is used in international transactions, but it means no more than draft. It is drawn by one person upon another and is to be paid to a third party or bank.

**Bourse.**—The name given in Europe to a stock exchange.

**Broker.**—A man who executes an order for the purchase or sale of securities, in behalf of a customer, charging a small commission for his services.

**Bucket Shop.**—The name given to an office, which is ostensibly a regular brokerage concern, but which as a rule has no connection with or membership in any exchange. The concern accepts orders for the sale or purchase of stocks, but often records the order without executing it, or, if the order is executed, then the bucket shop sells as much stock as the customer buys, or buys as much as he sells, thus never carrying stocks. If the customer wins, the bucket shop loses. Conversely, if the

customer loses, the bucket shop wins. Practically, the bucket shop bets against its customers as to the course of the market. It is asserted that when the bucket shops of the country are loaded with orders for long stock for their customers, they engineer a raid upon the market, with a view to wiping out their customers' accounts and pocketing the money.

**Bull.**—A man who believes that the market is going up, who buys and carries stocks for a rise, and who labors to bring about higher prices.

**Call.**—A contract which pledges the man who sells the "call" to deliver a certain stock, at a certain time, at a price named. The seller receives a sum of money, say \$100, for the "call." Practically, the transaction is a bet between the parties as to the future course of the stock.

**Call Loans.**—Money loaned out on collateral security, with the understanding that the loan is to be repaid at any time on demand, that is to say, on call.

**Cats and Dogs.**—A Wall Street term, applied to obscure, non-dividend paying or worthless stocks. When the "cats and dogs" are suddenly boomed in price, the bull party is supposed to be for the moment at the end of its resources for continuing the upward movement.

**Clearing House.**—A building to which all the banks of a large city, connected with the Clearing House Association, send all the checks against other banks, received

in the course of the previous day's business. Each bank presents to the representatives of other banks the checks it has against them. If a bank has, on the total of these mutual exchanges, a credit balance, it receives from the Clearing House the amount in cash. If it has a debit balance, it must send the amount in cash promptly to the Clearing House. The credit and debit balances are exactly equal; and all the money received from one set of banks is at once paid out to the others. There is also a clearing house, connected with the stock exchange, in which stocks are "cleared" in the same way as the checks in the clearing house of the banks.

**Clearing House Loan Certificates.**—These are certificates for money, issued in times of monetary stringency, by the Clearing House, upon deposits of securities as collateral. They are received by all the banks in the association, in lieu of cash, in the settlement of balances against each other, and they enable the banks to go through a financial crisis without suspending payment.

**Commission.**—A broker's charge for the sale or purchase of securities. It amounts to  $\frac{1}{8}$ th of one per cent for each transaction, or \$12.50 for each 100 shares of stock.

**Contango.**—A term used in London, meaning the charge paid by the buyer of stocks for continuing his contracts until the next fortnightly settlement.

**Corner.**—A situation, when all the floating supply of a stock has been purchased by a pool or by operators, who can then dictate the price at which sales shall be made.

It is a fearful weapon against those who have sold a stock short. A great many successful corners have been engineered in Wall Street and many others have been attempted but failed.

**Covering.**—The buying back of stocks, which have been sold short.

**Domestic Exchange.**—Drafts for money issued in one city and payable in another. The discount, or premium, at the banks on domestic exchange shows which way the tide of money is tending between the two cities. If a bank in Chicago has too much money on deposit in New York and can use its funds more profitably at home, it buys drafts on New York only at a discount, and sells drafts on New York either without charging a premium or at a discount.

**Finance Bills.**—Foreign exchange is sometimes sold by the international bankers, not against a credit for goods, produce, or securities sold abroad, but against money borrowed abroad. In that case, the drafts are called finance bills.

**Flat.**—Without interest. When stocks are loaned flat, it signifies that the short interest in stocks is large.

**Foreign Exchange.**—Drafts for money, issued by bankers in the United States against bankers abroad. When goods, produce or securities are bought in the United States by foreign purchasers, the sellers here go to an international bank and deposit their own drafts against



the purchasers, with bills of lading, etc., and receive the banker's own drafts against his correspondent abroad. Cotton is the quickest maker of foreign exchange. Whether exchange is high or low is of great importance to Wall Street. When it is high, the tendency is toward exports of gold, that is to say we have been buying abroad more than we have sold and the excess must be paid for in gold. Conversely, when exchange is low, the tendency is toward imports of gold. Par of exchange is 4.8665. No exact figure can be named for the gold export and import points of exchange, because the figures vary from day to day; but normally, when exchange sells around 4.89 or higher, gold exports are indicated; and when it sells around 4.842 or lower, gold imports are probable.

**Fractional Lot.**—Stocks are sold, normally, in blocks of 100 shares or their multiple. A fractional lot is less than 100 shares, and usually costs, to buy, a trifle more per share than in the case of 100 shares, say  $\frac{1}{4}$  of a point.

**Giving Up.**—Frequently a situation arises in which a broker does not wish to appear personally as a buyer or seller of a certain stock, or a customer wishes to operate through another than his regular broker. A different broker is employed to execute the order, who then "gives up" the name of the broker for whom the order has been executed, and that ends the transaction.

**Granger Roads.**—The northwestern lines, whose earnings are in a large measure due to the transportation of grain. The leading grangers are the Atchison, St. Paul, Rock Island, Alton, Northwestern and Union Pacific roads.

**Holding the Bag.**—Taking all the stock offered without bidding for it. It signifies either quiet accumulation or an unwilling taking of stock by a pool or the bankers, who give this support to a stock or the general market in times of reaction.

**Kaffirs.**—A name used in London for South African mining shares.

**Lamb.**—The novice in stocks, the credulous and inexperienced, upon whom the unscrupulous prey.

**Legal Reserve.**—The amount of money required by law to be held against deposits. The national banks of New York are compelled to keep 25 per cent of the amount of deposits in their vaults in lawful money or specie; and when the reserve falls below 25 per cent the banks are forbidden to add to their loans.

**Legal Tender.**—Ten kinds of money are in circulation in the United States. The following are legal tender: Gold coin, standard silver dollars, and Treasury notes, act of July 14, 1890, for all debts, public and private. United States notes (greenbacks), for all purposes, except duties on imports and interest on the public debt. Subsidiary silver coin, in amounts not more than \$10, in one payment. Minor coins, to the amount of 25 cents. The following are not legal tender: Gold certificates, silver certificates, and national bank notes; but the certificates are receivable for all public dues, and national bank notes are receivable for all public dues except duties on imports. The Government has the right to pay out national

bank notes for all its debts, except interest on the national debt and except in redemption of national currency.

**Long.**—To be “long” of stocks is to have bought them for a rise.

**Manipulation.**—The operations whereby stocks are forcibly raised or lowered in price, without reference to outside conditions. The art of manipulation has been carefully studied and proceeds with a thorough knowledge of human nature. If the public are to be attracted into buying a stock, it must be kept active. Operators usually resort to matched orders, that is to say, they order one broker to buy a certain number of thousand shares of a stock at a given price and another broker is ordered to sell an equal quantity. Another lot is bought at a higher price and a similar lot sold at that price or better, if better price can be obtained. The process, carried out with energy, sends the price of the stock up. When a stock is to be depressed in price, similar tactics are resorted to on the downward side. The exchanges forbid fictitious sales; but as these matched sales and purchases are cleared regularly through the stock exchange clearing house, and as a commission is paid upon them, they form a regular feature of every campaign in stocks and cannot be prevented. The art of manipulation has other features, among them the setting afloat of rumors calculated to aid the result desired by the operator.

**Margin.**—When a man buys stocks on a “margin” he does not pay the full value for them, but deposits with his broker a certain percentage of the par value. Ten per cent is the usual margin. The stocks must be paid

for in full, and the broker does that out of money he has borrowed from the banks on time or call loans. In the case of wild and dangerous stocks, the broker requires 20 per cent margin. A few active speculators arrange to have their stocks carried on a 5 per cent margin. Whatever the margin, say 10 per cent, if the stocks decline in value an equal number of points, the margin is wiped out. The buyer of stocks is obliged to pay interest on the amount of money advanced by the broker upon the purchase. Upon short sales of stocks no interest is charged, which makes short sales a favorite with many traders.

**Parity.**—Equality in value. If stocks sell in Boston at the same price as in New York, they sell on a parity.

**Point.**—A “point” in stocks is \$1 a share;  $\frac{1}{2}$  point, half a dollar a share; and so on.

**Pool.**—An association of a few individuals for operations in the stock market. A pool aims either to bull or bear stocks. There is always a manager of the pool, who assigns to each member the amount of stock he must carry until the deal is finished, and the part he shall play in the daily buying and selling required for manipulation of the stock. In order to conceal the purposes of the pool and its exact position, some of its members sometimes sell stocks openly, while the pool is really accumulating, and vice versa. A “blind pool” is one in which the members contribute the money for its operations but take no part in its operations, the manager alone knowing what is being done until the final accounting to the members.

**Put.**—A “put” entitles the buyer thereof to “put” or

deliver stock to its signer, within a time and at a price named. The buyer pays a certain sum for the privilege. A "put" is only one form of betting that a stock will, or will not, decline in value.

**Pyramiding.**—When a speculator for the rise has a profit on the stock already bought, he sometimes uses this greater value of the stock as a margin for farther purchases. The speculator for a fall follows the same plan, making his profits the basis for additional sales. It is a dangerous expedient and can be resorted to with safety only in the early part of a long swing in the market either way.

**Short.**—To be short of stocks is to have sold them for a fall. The trader is out of all long stock and then "goes short." He orders the sale of a certain number of shares; the broker sells them at ruling prices. The broker must deliver the shares thus sold, and he borrows them from some other house and pays for them in full. When the short sales are covered, the stock then bought is delivered to the house from which the original lot was borrowed. As the broker who loans stock and receives pay for it in cash can then loan out the money so received at interest, he usually pays interest to the borrowing broker. When, however, the short interest in the market is large, he does not pay interest, or at any rate only a nominal rate.

**Spreads and Straddles.**—A "spread" is a double privilege, which entitles the holder either to deliver to or call from the signer the stocks named in the contract at the prices stated. If the price in each case is the same, the privilege is a "straddle."

**Stop Orders.**—The same as "stop loss orders." If a

trader is carrying long stock, and wishes to make sure of some of his profits, in the event of an unexpected decline, or if the market is going against him and he wishes to limit his loss, he gives the broker a "stop order." If he has bought stock at 100 and it has risen to 110, he might say "sell at 105, stop." Then if the stock falls to 105, it is sold at once and the owner has at any rate made five points on his purchase. If he has bought at 100 and the stock does not go up, he might order the broker to "sell at 98 stop." His loss would be limited to two points. Stop orders are used conversely by those who sell short.

**Surplus Reserve.**—The amount of reserve in lawful money of the associated banks, or of a single bank, in excess of the 25 per cent required by law. If surplus reserve is large, the loaning power of the banks is equally so. If surplus reserve disappears, and especially if it is replaced by a deficit, the loaning power of the banks is exhausted. In the latter case, the banks are obliged to call in and reduce their loans.

**Technical Conditions.**—A rally in the market is sometimes engineered on "technical conditions," which would mean that the market was oversold, i. e., the short interest was unduly large. A decline may take place on a different set of technical conditions, the market being overbought, that is to say, all the brokerage houses loaded with long stock and no short interest in the market.

**Washed Sales.**—Practically the same as "matched orders."

**Wild Cat Stocks.**—Virtually the same as the "cats and dogs," the "pups," etc.

RANGE OF LEADING STOCKS

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	AMAL. COPPER			AM. CAR & FRY., PTD.			AM. LOCO., PTD.			AMER. SMELTING		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890												
1891												
1892												
1893												
1894												
1895												
1896												
1897												
1898												
1899				3½	51 Dec	68½ Sep				0	30 Dec	59 Apr
1900	8	89½ Dec	99½ Nov	7	57½ Jun	72 Dec				0	34½ Jun	56½ Dec
1901	7½	60½ Dec	130 Jun	7	67 Jan	89½ Jul				0	38½ Oct	69 Apr
1902	2½	53 Oct	79 Feb	7	85½ Jan	93½ Oct	1½	83½ Oct	91½ Nov	0	37 Nov	49½ May
1903	2	38½ Oct	75½ Mch	7	60½ Nov	93 Jan	7	89 Jan	100½ Apr	0	36½ Oct	52½ Feb
1904	2	43½ Feb	82½ Dec	7	67 Jan	94½ Dec	7	67½ Oct	95½ Feb	5	46 Feb	82½ Dec
1905	4½	70 Jan	111½ Dec	6½	91½ Jan	104½ Apr	7	103½ Jan	122½ Apr	5½	79½ Jan	170½ Dec
1906	7	92½ Jul	118½ Feb	7	98½ Jul	105 Jan	7	108½ Dec	120½ Jan	7	138½ May	174 Jan

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	AMERICAN SUGAR			ATCHISON			BALTIMORE & OHIO			BE. RAP. TRANSIT			
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High	
1890		49	Nov 95	0	23½	Nov 50½	0			0			
1891	4	57½	Jan 93½	0	24½	Mch 47½	20						
1892	10½	73½	Jan 114½	0	32½	May 46½	3½	92½	Oct 101½				
1893	21½	61½	Jul 134½	0	9½	Dec 36½	5	54½	Jul 97½				
1894	12	75½	Jan 114½	0	3	Jul 16	4½	58½	Dec 81½				
1895	12	86½	Jan 121½	0	3½	Jan 23½	0	32½	Dec 66½				
1896	12	95	Aug 126½	0	8½	Aug 18	0	10½	Sep 44		18	Aug 25½	
1897	12	109½	Mch 159½	0	9½	Apr 17	0	9	Jul 21½		0	18½	Jan 37½
1898	12	107½	Mch 146½	0	10½	Apr 19½	0	12½	Jan 172½		0	35	Mch 78½
1899	12	114½	Dec 182	0	17	May 24½	0	43½	Jun 61½		0	61	Dec 137
1900	7½	95½	Mch 149	0	18½	Jan 48½	2	55½	Jan 89½		0	47½	Sep 86½
1901	7	103½	Dec 153	3½	42½	Jan 91	4	81½	Jan 113		0	55½	Oct 86½
1902	7	113	Nov 135½	4	74½	Jan 96½	4	92½	Dec 115½		0	54½	Nov 72½
1903	7	107½	Oct 134½	4	54	Aug 89½	4	71½	Sep 104		0	29½	Sep 71½
1904	7	122½	Mch 153	4	64	Feb 89½	4	72½	Mch 105½		0	38	Feb 70½
1905	7	130	May 154½	4	77½	May 93½	4	100½	Jan 117		0	56½	May 91½
1906	7	127½	May 157	4½	86½	May 110½	4½	105½	May 125½		0	71	Jul 94½



RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	BE. UNION GAS			CANADIAN PACIFIC			CENTRAL OF N. J.			CHES. & OHIO		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
	1890				0	67 Nov	84½ Aug	6	92 Nov	128½ May	0	14½ Dec
1891				0	72½ Jan	91½ Dec	6½	105½ Jun	122½ Apr	0	14½ Jul	28 Sep
1892				0	86 Oct	94½ Jan	7	111½ Jan	145 Feb	0	21½ Sep	28 Jan
1893				0	66 Jul	90½ Jan	7	84 Jul	132½ Jan	0	12½ Jul	26 Apr
1894				5	58 Dec	73½ Jan	7	87½ Dec	117½ Mch	0	16 May	21½ Aug
1895				0	33 Mch	62½ Sep	5	81½ Feb	116½ Sep	0	12½ Dec	23½ May
1896	6	75½ Aug	96 Nov	2½	52 Jan	62½ May	5	87½ Aug	110 Nov	0	11 Aug	18½ Nov
1897	6	85 Jan	137 Sep	2½	46½ Mch	82 Dec	4	68½ May	103½ Jan	0	15½ Mch	27½ Aug
1898	6	106 Mch	140½ Dec	4½	72 Apr	90½ Jan	4	84½ Nov	99 Dec	0	17½ Mch	26½ Dec
1899	6	130 Dec	160 Mch	4	84½ Mch	98½ Mch	4½	97 Jan	126½ Nov	1	23½ May	31½ Dec
1900	7	140 Jan	183 Dec	5½	84½ Sep	98½ Feb	5	115 Jan	150½ Dec	1	24 Jun	42½ Dec
1901	8	175 Jan	228 Apr	5	87 May	117½ May	5½	145½ Jan	196½ Dec	1	29 May	52½ May
1902	8	210 Jan	253 Aug	5	112½ Jan	145½ Sep	8	165 Nov	198 Jan	1	42½ Dec	57½ Sep
1903	8	170 Sep	225 Jan	5½	115½ Oct	138½ Feb	8	153 Oct	190 Jan	1	27½ Nov	53½ Jan
1904	9	185 Mch	229½ Oct	6	109½ Mch	135½ Oct	8	154½ Feb	194½ Nov	1	28½ Mch	51 Nov
1905	9	175 Dec	215 Feb	6	130½ Jan	177½ Sep	8	190 May	235 Oct	1	45½ May	59½ Sep
1906	3	105½ Nov	178 Jan	6	155½ May	201½ Dec	8	204 May	239½ May	1	51½ Nov	65½ Aug

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	CHICAGO & ALTON			CHIC., MIL. & ST. PAUL			OH. & NO. WESTERN			C., C. C. & ST. LOUIS		
	Div	Low	High	Div	Low	High	Jy	Low	High	Div	Low	High
1890	8	123 Nov	135 Jan	0	44 Nov	78½ May		98 Dec	117 May	4	55 Nov	80½ Jun
1891	8	123 May	141 Dec	0	51½ Meh	82½ Dec		102½ Meh	118½ Dec	3	56½ Jul	74½ Sep
1892	8	139½ Jan	154 Jul		75½ Apr	84½ Aug		110½ Dec	121½ Meh	3	57 Dec	75 Jan
1893	8	126 Aug	145½ Feb		46½ Jul	83½ Jan		84½ Jul	116½ Feb	3	25 Jul	60½ Jan
1894	8	130 Feb	146½ Nov		54½ Jan	67½ Sep		96½ Dec	110½ Jun	0	31 Jan	42 Aug
1895	8	145 Feb	170 Sep		53½ Meh	78½ Sep	5	87½ Meh	107½ Oct	0	28 Dec	50 Aug
1896	8	146 Aug	164 Nov	4	59½ Aug	80 Nov	5	85½ Aug	106½ Apr	0	19½ Aug	39½ Feb
1897	7½	147 Jul	170 Meh	5	69½ Apr	102 Sep	5	101½ Apr	132½ Sep	0	21½ Jun	41½ Sep
1898	7	150 Meh	172 Dec	5	83½ Apr	120½ Dec	5	113½ Meh	143½ Dec	0	25 Meh	47½ Aug
1899	7	168 Jan	175½ Meh	5	112 Dec	136½ Sep	6	141½ Jan	173 Sep	0	42½ Jan	64½ Nov
1900	37	31 Oct	42 Dec	5	108½ Jun	148½ Dec	6	150½ Jun	172½ Dec	3	50 Aug	76 Dec
1901	0	27 May	50½ Apr	6	134 May	188 May	6	168½ Jan	215 May	3½	73 May	101 Nov
1902	0	29½ Dec	45½ Jul	7	160½ Jan	198½ Sep	7	204½ Jan	271 Apr	4	93 Nov	108½ Aug
1903	0	18½ Sep	37½ Jan	7	133½ Aug	183½ Jan	7	153 Aug	224½ Jan	4	66 Aug	99½ Jan
1904	0	33 Jan	47½ Nov	7	137½ Feb	177½ Dec	7	161½ Meh	214½ Dec	4	68½ May	93½ Dec
1905	0	30 Dec	44½ Meh	7	168½ May	187 Aug	7	190½ June	249 Jan	4	90 Jan	111 Meh
1906	0	25 May	38½ Jan	7	146½ Dec	199½ Dec	7	192 Apr	240 Jan	4	89 Dec	109½ Jan

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	COLO. FUEL			CONSOL. GAS			COAL PRODUCTS, PYD.			DELAWARE & HUDSON		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890	0	29½ Dec	54 May	6	85 Dec	107½ May				7	120 Dec	175 May
1891	0	27½ Jul	39½ Mch	6	92½ Jul	104½ Dec				7	120½ Dec	140½ Sep
1892	0	28½ May	43½ Oct	6	102 Jan	128 Nov				7	122½ Jan	149½ Apr
1893	1½	17½ Aug	72 Feb	7½	108 Jul	144 Jan				7	102½ Jul	139 Jan
1894	0	21 Jan	27½ Apr	8	111 Jul	140 Apr				7	119½ Oct	144½ Apr
1895	0	20½ Dec	41½ Sep	8	126 Jan	161½ Dec				7	118 Dec	134½ Sep
1896	0	14½ Aug	34½ Feb	8	133 Aug	168 Nov				7	114½ Aug	129½ Feb
1897	0	15½ Jun	27½ Sep	8	136½ Jan	211½ Sep				5	99½ Apr	123 Sep
1898	0	17 Mch	32½ Dec	8	164 Oct	205½ Jun				5	93 Nov	114½ Feb
1899	0	30½ Feb	64 Sep	5½	163 Jun	223½ Mch				5	106½ Jan	135½ Sep
1900	0	29½ Jun	56½ Dec	6	164 Sep	201 Nov				5	106½ Sep	134½ Dec
1901	3½	41½ Jan	136½ Jun	8	187 Jan	238 May				7	105 May	185½ Apr
1902	3½	73½ Aug	110½ Apr	8	205 Dec	230½ Apr	3½	79½ Dec	90 Mch	7	153½ Nov	184½ Jan
1903	0	24 Nov	82½ Jan	8	164 Aug	222 Oct	7	60 Nov	85½ Jan	7	149 Aug	183½ Feb
1904	0	25½ Mch	58½ Nov	8½	185 Feb	220 Oct	7	65 Mch	82½ Nov	7	149 Mch	190½ Dec
1905	0	38 May	59 Mch	8½	175 Nov	214 Mch	1	40 Aug	79 Jan	7	178½ May	237 Nov
1906	0	40½ May	83½ Jan	5	130½ Apr	181½ Jan	1	74½ May	86½ Apr	7	189 May	234½ Nov

RANGE OF LEADING STOCKS

HOW MONEY IS MADE

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	DEL., LACL. & Wx.			ERIE			ERIE, 1st PTD.			FED. MG. & SM., PTD.		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890	7	123½ Nov	149½ Jul	0	16 Nov	29½ May	0	46 Dec	69½ May			
1891	7	130½ Jul	145½ Sep	0	17½ Jul	34½ Dec	0	47½ Jun	77½ Dec			
1892	7	138½ Jan	167½ Feb	0	23½ Dec	34½ Jan	3	53½ Dec	77½ Mch			
1893	7	127 Jul	175 Nov	0	7½ Jul	26½ Jan	0	15 Jul	58 Jan			
1894	7	155½ Oct	174 Sep	0	9½ Dec	18½ Mch	0	23 Dec	39½ Mch			
1895	7	154 Dec	174 Oct	0	7½ Mch	15½ Dec	0	16 Feb	32½ Jun			
1896	7	138 Aug	166 Jun	0	10½ Aug	17½ Nov	0	27 Jul	41½ Mch			
1897	7	146½ May	164 Aug	0	11½ Apl	19 Sep	0	27 Apr	46½ Sep			
1898	7	140 Oct	159 Feb	0	11 Apl	16½ Feb	0	29½ Apr	43½ Feb			
1899	7	157 Jan	194½ Oct	0	10 Dec	16½ Jan	0	27½ Dec	42 Jan			
1900	7	171½ Sep	194½ Dec	0	10½ Sep	27½ Dec	0	30½ Sep	63½ Dec			
1901	7	188½ Jan	258 Dec	0	24½ May	45½ Jun	1½	59½ Jan	75 Dec			
1902	7	231 Nov	297 Feb	0	28½ Dec	44½ Jan	3	60½ Dec	75½ Jan			
1903	7	230 Jul	276½ Feb	0	23 Aug	42½ Jan	3½	62½ Apr	74 Feb			
1904	17	250½ Feb	359½ Dec	0	21½ May	41½ Nov	4	55½ May	77 Dec	7	71 Nov	90 Nov
1905	19½	335 Jan	498½ Oct	0	37½ May	52½ Aug	4	74½ May	85½ Aug	7	60 Jan	145 Nov
1906	10	437½ May	560 May	0	36½ May	50½ Jan	4	74½ Dec	83 Jan	7	91 Jul	112½ Jan

RANGE OF LEADING STOCKS

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	GEN. ELECTRIC			HOCKING VALLEY			ILL. CENTRAL			INT. PAPER, PTD.		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890		65 Nov	119 May	0	18½ Jan	32½ Sep	6	85 Nov	120 Jan			
1891		88 Jan	111 Feb	0	22 Jul	34½ Sep	5	90 Mch	109½ Dec			
1892	4	88½ Jan	119½ Oct	0	27 Dec	40 May	5	95½ Sep	110 Jan			
1893	6	30 Jul	114½ Jan	0	11½ Aug	32½ Jan	5	86 Jul	104 Jan			
1894	0	30½ Jan	45½ Mch	0	15½ Jul	20½ Mch	5	82½ Dec	95½ Sep			
1895	0	20 Dec	41 Sep	0	14½ Dec	27½ Apr	5	81½ Jan	106 Sep			
1896	0	20 Jul	39½ Mch	0	12½ Aug	20½ Nov	5	84½ Aug	98 Jan			
1897	0	28½ May	41½ Sep	0	1½ Apr	18 Jan	5	91½ Apr	110½ Aug			
1898	0	29½ Mch	97 Dec	0	2½ Nov	8½ Feb	5	96 Apr	115½ Dec	3	85 Sep	97½ Oct
1899	3	95½ Jan	132 Nov	0	22 Jul	37½ Sep	5	105½ Dec	122 Jan	6	62½ Dec	95 Jan
1900	6½	120 Jan	200 Dec	0	30½ Jan	42½ Dec	5½	110 Jun	132½ Dec	6	58 Mch	75 Nov
1901	9	183½ Jan	289½ Dec	1½	40½ May	75½ Dec	6	124 May	154½ Jun	6	69 Jan	81½ Sep
1902	8	170½ Oct	334 Apr	3	66 Jan	106 Aug	6	137 Jan	173½ Aug	6	70 Dec	77½ Jan
1903	8	136 Sep	204 Feb	3	63 Sep	106½ Feb	6	125½ Jul	151 Jan	6	57½ Nov	74½ Feb
1904	8	151 Jun	194½ Nov	3	60 May	94 Dec	6	126½ Feb	159 Dec	6	64½ Feb	79½ Dec
1905	8	169 May	192 Mch	3	86½ Jan	121½ Dec	7	153½ Jan	183 Sep	6	76½ Feb	88½ Dec
1906	8	156 Dec	184 Oct	3	113½ Feb	135 Apr	6	164 May	184½ Jun	6	80 Dec	90 Jan

BOX MONEY IS MADE

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	LAKE SHORES			LOUIS. & NARR.			MANHATTAN			MEMPHISIAN MARKET		
	Dty	Low	High	Dty	Low	High	Dty	Low	High	Dty	Low	High
1890	6	101	Dec	1 1/2	65 1/2	Nov	6	92	Nov	117	May	
1891	6	105 1/2	Jun	5	65 1/2	Aug	6	95	Jul	100	Apr	
1892	6	120	Jan	4 1/2	64 1/2	Sep	6	104	Jan	100 1/2	Dec	
1893	6	104	Jul	4	39 1/2	Dec	6	100	Jul	174 1/2	Jan	
1894	6	118 1/2	Jan	0	40 1/2	Jan	6	102 1/2	Nov	127 1/2	Apr	
1895	6	134 1/2	Jan	0	39	Dec	6	95	Dec	119 1/2	May	
1896	6	134 1/2	Jan	0	37 1/2	Aug	6	73 1/2	Aug	113 1/2	Feb	
1897	6	152	Jan	0	40 1/2	Apr	4	81 1/2	May	113	Mar	
1898	7	170 1/2	Jan	0	44	Apr	4	90	Oct	120 1/2	Jan	
1899	7	196 1/2	Jan	3 1/2	63	Mar	4	80 1/2	Dec	135 1/2	Apr	
1900	7	197	Jan	4	68 1/2	Sep	4	84	Jun	116 1/2	Dec	
1901	7	230	Apr	5	76	May	4	83	May	145	Dec	
1902	7	328	Jun	5	102 1/2	Jan	4 1/2	128	Mar	168	Nov	
1903	7 1/2	275	Dec	5	95	Sep	7 1/2	126 1/2	Mar	155 1/2	Jan	
1904	8	245	Nov	5	101	Feb	7 1/2	139 1/2	Mar	169 1/2	Nov	
1905	8	290	Jan	6	134 1/2	Jan	7	161	May	175	Feb	
1906	8	335	Dec	6	136 1/2	May	7	140	Sep	162	Jan	

RANGE OF LEADING STOCKS

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RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	MEX., S. F. & S. S. M.			MO., KAN. & TEX., PTD.			MISSOURI PAC.			NATIONAL LEAD, PTD.		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890				0	16 Dec	31½ May	4	53 Dec.	79½ May	0	81½ Dec	83½ Dec
1891				0	19½ Mch	29½ Sep	3	54½ Oct	77½ Sep	7	81 Mch	99½ Aug
1892				0	2½ Dec	33½ Jan	0	53½ Dec	65½ Jan	7	48 Jul	96 Jan
1893	0	19½ Feb	39½ Jan	0	13½ Jul	28½ Jan	0	16½ Jul	60 Jan	7	68 Jan	92½ Aug
1894	0	Not	quoted	0	18½ Jun	27½ Apr	0	18½ Jan	32½ Apr	7	73 Dec	94½ Aug
1895	0	"	"	0	18½ Dec	41 Sep	0	18½ Mch	42½ Sep	7	75 Aug	92½ Nov
1896	0	"	"	0	16 Jul	31½ Feb	0	15 Aug	29½ Apr	7	88½ Feb	109½ Sep
1897	0	6 Dec	6 Dec	0	24½ Apr	42 Sep	0	10 May	40½ Sep	7	99 Apr	114½ Dec
1898	0	7 Jan	7 Jan	0	28½ Mch	46½ Dec	0	22 Mch	46½ Dec	7	103½ Dec	115 Jan
1899	0	8½ Jan	37½ May	0	28½ Dec	45½ Aug	0	33 Dec	52½ Apr	7	83 Aug	106½ Feb
1900	0	14 Sep	27 Apr	0	25½ Sep	47½ Dec	0	38½ Jan	72½ Dec	7	74½ Dec	93½ Jun
1901	0	15 May	36½ Nov	0	37 May	68½ Apr	2½	69 Jan	124½ Jun	7	78½ Jan	96 Oct
1902	0	36½ Jan	84 Nov	0	51 Jan	69½ Sep	5	96½ Mch	125½ Sep	7	75 Oct	95 Feb
1903	2	42 Aug	79½ Feb	0	33 Oct	63½ Feb	5	85½ Aug	115½ Feb	7	80½ Jan	98½ Dec
1904	4	55 Jan	95 Oct	0	32½ Jun	65½ Dec	5	87 Feb	111½ Dec	7	97½ Jan	111½ Feb
1905	4	89½ Jan	145 Dec	0	50½ May	73 Aug	5	94½ May	110½ Mch	7	100½ Jun	106½ Jan
1906	4	134 Dec	164 Mch	4	64½ Apr	76 Nov	5	85½ May	106½ Jan	7		

## RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	N. Y. CENTRAL & H. R.			N. Y., CHIC. & ST. L., 1st Pfd.			N. Y., NEW HAVEN & H.			N. Y., ONT. & WES.		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890	4½	95½ Dec	111 Jun	0	50 Nov	75 May	10	224½ Jan	270 Jun	0	13 Nov	21½ Jun
1891	4½	98½ Jul	119½ Dec	3½	57 Jan	84 Oct	10	224½ Nov	271 Feb	0	14 Jul	23½ Sep
1892	5	107½ Sep	119½ Mch	3	71½ Sep	81½ Jan	10	224 Jan	252 Jun	0	17½ Sep	23½ Feb
1893	5	92 Jul	111½ Jan	3	45 Jul	78 Jan	10	188 Sep	262½ Jan	0	11 Jul	19½ Jan
1894	5	95½ May	102½ Aug	4	62 Jul	75½ Feb	10	178 Jul	197 Dec	0	14 Jun	17½ Sep
1895	4	90 Dec	104½ Aug	0	65 Apr	75 Dec	9	174 Dec	218 Jun	0	11½ Dec	19½ May
1896	4	88 Aug	99½ Feb	5	60 Aug	80 Jan	8	160 Jul	184 Jan	0	11½ Aug	16½ Nov
1897	4	92½ Feb	115½ Sep	0	60 May	81½ Sep	8	160 Feb	185½ Sep	0	12½ Apr	20½ Sep
1898	4	105 Mch	124½ Dec	2	65 May	76 Jan	8	178½ Jan	201 Dec	0	13½ Apr	19½ Dec
1899	4½	120 Dec	144½ Mch	0	65 Mch	85 Oct	8	198 Jan	222 Apr	0	18½ Jan	28½ Mch
1900	5	125½ Jun	145½ Dec	5	74½ May	110 Dec	8	207½ Sep	215½ Jan	0	18½ Jun	32½ Dec
1901	5	129½ Jan	174½ Nov	5	97 Mch	120 Sep	8	206½ Feb	217 Jun	0	24 May	40½ May
1902	5	147 Nov	168½ Jan	5	110½ Nov	124½ Jan	8	209½ Jan	255 Apr	0	25½ Dec	37½ Sep
1903	5	112½ Jul	156 Jan	5	100 Oct	118 Jan	8	187½ May	225½ Jan	0	19 Sep	35½ Feb
1904	5	112½ Mch	145½ Dec	5	100½ Feb	115 Nov	8	185½ May	199 Oct	0	19½ Mch	47½ Oct
1905	5	136½ May	167½ Mch	5	114 Jul	122½ Jan	8	191½ Dec	216 Sep	4½	40½ Jan	64 Mch
1906	5½	126 Nov	154½ Jan	5	111 Apr	120½ Jan	8	189½ Dec	204½ Jan	2	43½ May	57½ Jan



RANGE OF LEADING STOCKS

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RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	NAT'L BISCUIT, PFD.		NORF. & WESTERN			NORTH AMERICAN			NORTHERN PAC.			
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890				0	13 Nov	24½ May	0	7 Nov	47½ Sep	4	16½ Nov	39½ Jun
1891				0	13 Aug	18½ Oct	0	11½ Jan	21½ Oct	4	20½ Jul	30½ Sep
1892				0	9 Sep	18 Jan	0	9½ Dec	18½ Jan	2	15 Dec	28½ Jan
1893				0	5½ Jul	9½ Jan	0	2½ Aug	11½ Mch	0	3½ Aug	18½ Feb
1894				0	4 Jul	9½ Sep	0	2½ Jul	5½ Mch	0	3½ Jul	6½ Mch
1895				0	1½ Dec	6½ May	0	2½ Jan	7 May	0	2½ Jan	8½ May
1896				0	0½ Apr	12½ Nov	0	3½ Aug	6½ Feb	0	0½ May	*16½ Nov
1897				0	9 Apr	17½ Sep	0	3½ Apr	6½ Aug	0	11 Apr	22½ Dec
1898	5½	94½ Aug	106 Dec	0	11 Oct	19½ Dec	0	4½ Jan	7½ Dec	0	19 Feb	44½ Dec
1899	7	89 Dec	107½ Jan	0	17½ Jan	28½ Aug	0	6½ Jan	17½ Nov	2	42½ Jan	57½ Aug
1900	7	79½ Jun	96 Feb	0	22½ Jan	45½ Dec	0	13½ Jan	22½ Dec	4	45½ Sep	86½ Dec
1901	7	92 Jan	103½ Nov	2	45½ Jul	61½ Nov	0	19½ Jan	109 Jun	4	77½ Jan	1000 May
1902	7	101½ Dec	109½ Apr	2½	55 Jan	80½ Oct	0	88 Jan	134 Sep	5½	In the Merger	
1903	7	94 Oct	106½ May	3	53½ Nov	76½ Feb	4	68 Sep	124½ Jan	7	"	"
1904	7	100½ Jan	117 Nov	3	53½ Mch	80½ Dec	5	80 Mch	107 Nov	6½	"	"
1905	7	110 Aug	120½ Mch	3½	76 May	88½ Mch	5	95½ Nov	107 Apr	7	165 Apr	216 Aug
1906	7	113½ Jan	118½ Oct	4½	84 Apr	97½ Oct	5	87½ Nov	107 Jan	7	179½ May	232½ Feb

## RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	PACIFIC MAIL.			PENNSYLVANIA			PEOPLE'S GAS			PR. STEEL CAR. PTD.		
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
1890	0	27½ Dec	47½ Jul	5½	95½	113		41½ Mch	50½ Apr			
1891	0	31½ Jan	41½ Feb	6	99½	115		34 Jan	71½ Dec			
1892	0	25 Dec	40½ Jan	6	106	114½		71½ Jan	99½ Nov			
1893	0	8½ Jul	27½ Jan	5	93	111		39 Jul	94½ Jan			
1894	0	13½ May	24 Nov	5	96	104½		58½ Jan	80 Jun			
1895	0	20 Jan	34½ Sep	5	97½	115		49½ Jul	78½ Jan			
1896	1	15½ Aug	31 Feb	5	99½	109½		44½ Aug	78½ Nov			
1897	2	24 Jan	39½ Sep	5	103½ Jan	119 Sep		73½ Jan	108½ Sep			
1898	2½	21 Apr	46 Dec	5	110½ Mch	123½ Dec	6	86½ Apr	112 Nov			
1899	3	35 Dec	55 Jan	5	122½ Jan	142 Jan	6	90½ Dec	129½ Apr	5½	75 Dec	91 Sep
1900	0	25½ Jun	57 Nov	6	124½ Sep	149½ Dec	6	81½ Oct	111½ Apr	7	70½ Sep	89½ Nov
1901	0	30½ May	49½ Nov	6	137 May	161½ Apr	6	95½ Jan	120½ Jun	7	72½ Mch	89 Apr
1902	0	37 Nov	49½ Mch	6	147 Jan	170 Sep	6	98½ Jan	109½ Sep	7	82½ Feb	96½ Oct
1903	0	17 Aug	42½ Jan	6	110½ Nov	157½ Jan	6	87½ Sep	108½ Feb	7	62½ Nov	95 Feb
1904	0	24 Feb	55 Nov	6	111½ Mch	140 Dec	6	92½ Mch	112½ Dec	7	67 May	92 Dec
1905	0	33 May	53½ Dec	6	131½ May	148 Aug	6	97½ May	115½ Apr	7	87 Feb	101½ Oct
1906	0	28½ Jun	51½ Jan	6½	122½ Jul	147½ Jan	5	88 Jul	103 Jan	7	95 May	105 Feb

RANGE OF LEADING STOCKS

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	PULLMAN			READING			REP. IRON & S., PTD.			ROCK ISLAND			
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High	
1890	8	160 Dec	222 Jul	0	26½ Dec	48½ May				4	61½ Nov	98½ Jan	
1891	8	172 Nov	196½ Jan	0	25½ Aug	43½ Sep				4	63½ Mch	90½ Dec	
1892	8	184 Jan	200½ May	0	38 Jan	65 Feb				3	75½ Jun	94½ Jan	
1893	8	132 Aug	206 Apr	0	12 Jul	53½ Jan				4	51½ Jul	89½ Jan	
1894	8	152 Jul	174 Apr	0	13½ Dec	23½ Mch				4	58½ Oct	72½ Apr	
1895	8	146 Dec	178½ Jun	0	4½ Dec	22½ Sep				3	59 Dec	84½ Aug	
1896	8	138 Aug	164 Feb	0	2½ Jan	31½ Nov				2	49½ Aug	74½ Feb	
1897	8	152 Jan	185 Sep	0	16½ Apr	29½ Sep				2	60½ Apr	97½ Sep	
1898	28	132 Nov	216 Jul	0	15½ Mch	23½ Jan				3	80 Mch	114½ Dec	
1899	6½	156 Jan	207½ Oct	0	15½ Dec	25 Jan	1½	60½ Dec	79 Aug	4½	100 Dec	122½ Jan	
1900	8	176 Jun	204 Dec	0	15 Sep	26 Dec	7	49 Aug	70½ Feb	5	102 Jun	122½ Dec	
1901	8	195½ Jan	225 Oct	0	24½ Jan	58 Dec	7	55½ Jan	82 Apr	5	116½ Jan	175½ Jun	
1902	8	215 Jan	250 Apr	0	52½ Mch	78½ Sep	7	68 Jan	83½ Sep	5½	182 Jan	206 Sep	
1903	8	196 Jul	235½ Jan	0	37½ Nov	69½ Jan	7	36½ Nov	80½ Feb	0	33½ Dec	50½ Dec	
1904	8	209 Mch	242 Nov	0	38½ Mch	82½ Dec	0	37 May	73½ Nov	0	19½ Aug	53½ Jan	
1905	8	230 May	258 Aug	3½	79 Jan	143½ Nov	1½	67 Jan	108 Dec	0	19½ Mch	37½ Dec	
1906	8	180 Dec	270 Nov	4	112 May	164 Jan	15	91 May	110½ Jan	0	21½ Dec	37½ Jan	
											0	22½ Jul	32½ Nov

## RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	SOUTHERN RWT.				SOUTHERN PACIFIC				SL. SHEFF, ETC.				STANDARD OIL			
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High	
	1890	0	13 $\frac{1}{2}$ Nov	28 $\frac{1}{2}$ May	0	22 $\frac{1}{2}$ Oct	37 $\frac{1}{2}$ Apr	0						\$12 00	150	165
1891	0	8 $\frac{3}{8}$ Dec	19 $\frac{1}{2}$ Feb	0	23 Jan	44 $\frac{1}{2}$ Sep	0						12 00	159	165 $\frac{1}{2}$	
1892	0	6 $\frac{1}{2}$ Jun	17 $\frac{1}{2}$ Feb	0	33 $\frac{3}{8}$ Dec	41 $\frac{1}{2}$ Jan	0						12 21	157 $\frac{1}{2}$	163	
1893	0	0 $\frac{1}{8}$ Aug	12 Feb	0	17 $\frac{1}{2}$ Sep	35 $\frac{1}{2}$ Jan	0						12 00	135	168	
1894	0	10 $\frac{3}{8}$ Nov	14 $\frac{1}{2}$ Sep	0	17 $\frac{1}{2}$ Jul	25 Mch	0						12 00	158	166	
1895	0	7 Dec	14 $\frac{1}{2}$ May	0	16 $\frac{3}{8}$ Apr	26 $\frac{3}{8}$ Aug	0						17 00	168	200 $\frac{1}{2}$	
1896	0	6 $\frac{1}{2}$ Aug	11 $\frac{3}{8}$ Nov	0	14 Nov	22 $\frac{1}{2}$ Jan	0						31 00	199 $\frac{3}{8}$	262 $\frac{1}{2}$	
1897	0	7 Apr	12 $\frac{1}{2}$ Sep	0	13 $\frac{1}{2}$ Jan	23 $\frac{1}{2}$ Sep	0						33 00	251	361 $\frac{1}{2}$	
1898	0	7 Apr	10 $\frac{3}{8}$ Dec	0	12 Apr	35 Dec	0						30 00	360	443 $\frac{1}{2}$	
1899	0	10 May	14 $\frac{1}{2}$ Oct	0	27 May	44 $\frac{1}{2}$ Nov	0						33 00	448	475	
1900	0	10 $\frac{3}{8}$ Jun	23 $\frac{3}{8}$ Dec	0	30 $\frac{3}{8}$ Jun	45 $\frac{1}{2}$ Dec	0		17 $\frac{1}{2}$ Oct	26 Nov			48 00	472	824	
1901	0	18 Jan	35 $\frac{3}{8}$ Jun	0	29 May	63 $\frac{3}{8}$ Jun	0		19 $\frac{1}{2}$ Feb	41 $\frac{1}{2}$ Apr			48 00	650	824	
1902	0	28 Dec	41 $\frac{3}{8}$ Aug	0	56 Dec	81 $\frac{1}{2}$ Sep	0		29 $\frac{1}{2}$ Jan	83 Sep			45 00	615	715	
1903	0	16 $\frac{1}{2}$ Oct	36 $\frac{1}{2}$ Jan	0	38 $\frac{3}{8}$ Sep	68 $\frac{1}{2}$ Mch	0		22 $\frac{1}{2}$ Oct	72 Feb			44 00	585	748	
1904	0	18 $\frac{3}{8}$ Mch	37 $\frac{1}{2}$ Dec	0	41 $\frac{1}{2}$ Mch	68 $\frac{3}{8}$ Nov	0		31 $\frac{1}{2}$ Jan	65 $\frac{3}{8}$ Nov			36 00	595	669	
1905	0	28 May	38 Sep	0	57 $\frac{3}{8}$ May	72 $\frac{3}{8}$ Feb	5		60 Jan	118 $\frac{1}{2}$ Feb			40 00	595	702	
1906	0	31 $\frac{1}{2}$ Nov	42 $\frac{3}{8}$ Jan	2 $\frac{1}{2}$	61 May	97 $\frac{1}{2}$ Sep	5		68 $\frac{3}{8}$ Jul	97 $\frac{1}{2}$ Jan			40 00	505	700	

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	TENN. COAL & IRON				TEXAS PAC.				TOL., ST. L. & WN.				UNION PACIFIC			
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High	
1890	0	28 Nov	89 Jan	0	12 Dec	24½ May	0	17 Aug	19½ Aug	0	40 Dec	68½ Jan	0	32½ Aug	52½ Apr	
1891	0	24½ Jul	41½ Oct	0	10½ Dec	16½ Sep	0	Not	quoted	0	35½ Dec	50½ Jan	0	35½ Dec	50½ Jan	
1892	0	31½ Jul	50½ Mch	0	7 Jul	14½ Jan	0	8½ Jan	26 Feb	0	15½ Jul	42½ Jan	0	15½ Jul	42½ Jan	
1893	0	10½ Aug	37½ Jan	0	4½ Jul	11 Jan	0	8 May	17 Jan	0	7 Jul	22½ Mch	0	7 Jul	22½ Mch	
1894	0	14 Oct	20½ Sep	0	7 Jan	10½ Aug	0	2 Mch	2 Mch	0	4 Dec	17½ May	0	4 Dec	17½ May	
1895	0	13½ Jan	46½ Sep	0	6½ Dec	14½ Sep	0	6 Jun	11 Oct	0	3½ Jan	12½ Nov	0	3½ Jan	12½ Nov	
1896	0	13 Jul	34½ Feb	0	5 Aug	10½ Dec	0	5 Feb	5½ Apr	0	4½ Apr	26½ Dec	0	4½ Apr	26½ Dec	
1897	0	17 May	35½ Sep	0	8 Apr	15 Aug	0	Not	quoted	0	16½ Mch	44½ Dec	0	16½ Mch	44½ Dec	
1898	0	17 Mch	38½ Dec	0	8½ Mch	20½ Dec	0	"	"	0	38½ Jun	51½ Dec	0	38½ Jun	51½ Dec	
1899	0	36 Jan	126 Sep	0	12½ Dec	25½ Mch	0	"	"	0	44½ Jan	81½ Dec	0	44½ Jan	81½ Dec	
1900	6	49 Oct	104 Feb	0	13½ Jun	26½ Dec	0	"	"	3½	76 May	133 May	4	76 May	133 May	
1901	0	49½ Mch	76½ Jun	0	23½ Jan	52½ May	0	10½ Feb	25½ May	4	93½ Dec	113½ Aug	4	93½ Dec	113½ Aug	
1902	0	49½ Dec	74½ Apr	0	37 Dec	54½ Sep	0	18½ Jan	33½ Oct	4	65½ Aug	104½ Jan	4	65½ Aug	104½ Jan	
1903	0	25½ Nov	68½ Mch	0	20½ Aug	43½ Feb	0	15 Sep	30½ Feb	4	71 Mch	117 Nov	4	71 Mch	117 Nov	
1904	0	31½ May	77½ Nov	0	20½ Jun	38½ Nov	0	21½ May	38 Nov	4½	113 Jan	151½ Dec	4½	113 Jan	151½ Dec	
1905	3	68 Jan	148 Dec	0	23½ Apr	41 Mch	0	34½ May	40½ Mch	8	138½ May	195½ Sep	8	138½ May	195½ Sep	
1906	4	129 Jan	166 Nov	0	28 May	40½ Oct	0	24½ Jul	40½ Jan							

## RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	U. S. LEATHER, PFD. HOW, CENTRAL LEATHER.		U. S. RUBBER, PFD.		U. S. STEEL		U. S. STEEL, PFD.	
	Div	High Low	Div	High Low	Div	High Low	Div	High Low
1890								
1891								
1892								
1893								
1894		52½ Jun		93½ Dec				
1895	6	58 Feb	8	51 Aug				
1896	1	41½ Aug	8	80 Jan				
1897	4	50 Apr	8	75 Dec				
1898	4½	53½ Mch	6	65 Oct				
1899	5	64½ Dec	8	50 Jul				
1900	6	65 Jun	8	60 Mch				
1901	6	68½ May	8	99½ Dec				
1902	6	73½ Jan	8	74½ Dec				
1903	6	71½ Oct	1	47 Oct				
1904	6	75½ Jan	0	49½ Dec				
1905	6	100½ Jan	0	30½ Jul				
1906	7	103½ Jul	4½	41 Jan				
			8	100 Dec				
			8	98½ Jan				
			8	118½ Apr				
			8	115 Jan				
			2	104½ Jan				
			4	85 Jan				
			4	64 Mch				
			7	58 Feb				
			7	59½ Dec				
			7	33½ Dec				
			7	8½ May				
			7	24½ May				
			7	32½ Jul				
			3½	69 May				
			7	79 Dec				
			7	49½ Nov				
			7	89½ Jan				
			7	51½ May				
			7	90½ May				
			7	98½ Jul				
			7	113½ Jan				

RANGE OF LEADING STOCKS

RANGE OF LEADING STOCKS FOR SIXTEEN YEARS.

Years	WARREN, PTD.				WESTERN UNION				WISCONSIN CENTRAL			
	Div	Low	High	Div	Low	High	Div	Low	High	Div	Low	High
	1890	0	15 Dec	31½ May	5	71½ Dec	86½ May	0	14½ Nov	36½ Jan	0	14½ Nov
1891	0	16½ Jan	34½ Sep	5	76 Jan	85½ Sep	0	16 Jul	23½ Jan	0	16 Jul	23½ Jan
1892	0	22½ Jun	33½ Jan	5	82 Jan	100½ Aug	0	14½ Dec	21½ Jan	0	14½ Dec	21½ Jan
1893	0	10 Jul	26½ Feb	5	67½ Jul	101 Jan	0	4½ Dec	15½ Jan	0	4½ Dec	15½ Jan
1894	0	12½ Jan	18½ Apr	5	80½ Jan	92½ Sep	0	1½ Jul	8½ Apr	0	1½ Jul	8½ Apr
1895	0	12½ Jan	26½ Sep	5	82½ Dec	95½ Sep	0	2½ Feb	7½ Sep	0	2½ Feb	7½ Sep
1896	0	11 Aug	19½ Feb	5	72½ Aug	90½ Nov	0	1½ May	4½ Feb	0	1½ May	4½ Feb
1897	0	11½ Apr	24½ Sep	5	75½ May	96½ Sep	0	1 May	4½ Aug	0	1 May	4½ Aug
1898	0	14½ Mch	24½ Aug	5	82½ Mch	95½ Aug	0	0½ Jan	3½ Jan	0	0½ Jan	3½ Jan
1899	0	19 May	25½ Apr	5	82 Dec	98½ Jan	0	13½ May	21 Nov	0	13½ May	21 Nov
1900	0	16 Sep	27 Dec	5	77½ Jun	88½ Jan	0	10 Sep	20½ Mch	0	10 Sep	20½ Mch
1901	0	23½ Jan	46½ Jun	5	81 Jan	100½ May	0	14½ Jan	26 Jun	0	14½ Jan	26 Jun
1902	0	37 Dec	54½ Sep	5	84½ Jul	97½ Aug	0	19½ Jan	31 Aug	0	19½ Jan	31 Aug
1903	0	27½ Sep	55½ Feb	5	80½ Sep	93 Jan	0	14½ Oct	29½ Feb	0	14½ Oct	29½ Feb
1904	0	32½ Mch	48½ Nov	5	85 May	94½ Dec	0	16 Jun	25 Nov	0	16 Jun	25 Nov
1905	0	37 May	48 Feb	5	92 Jan	95½ Jun	0	20 Apr	33½ Aug	0	20 Apr	33½ Aug
1906	0	36½ Dec	53½ Feb	5	83½ Dec	94½ Jan	0	23 Jul	33 Jan	0	23 Jul	33 Jan

## INTEREST RATES AND SURPLUS DEPOSITS

THE rates of interest on call loans, and on time loans for four months or more, and the surplus deposits of the Clearing House banks, in New York city, since 1890 inclusive, are presented in following tables. Surplus deposits are given in round numbers. They are the excess of deposits over loans; and when deposits are less than loans, the fact is indicated by a minus sign.

1890

SURPLUS deposits had been ample for two years and call loans moderate, except in the crop season of 1889. In 1900, loans passed deposits in the latter part of the year; and, in consequence, after the January rise, stocks trended downward. Money was high, loans went to prohibitive rates, and troubles in Buenos Ayres and the Baring failure caused a panic.

1891

THE banking situation was improved by the liquidation. A money flurry in the Fall led to a break in stocks; and then as money came back to the banks, stocks rose, ending the year at about the highest.

1892

SURPLUS deposits were large until the Fall. Then they fell almost to zero. Stocks were strong the first half of the year, and rose above 1891. They were weak and sagging during the last six months. The market turned in 1892 for a strong downward movement.

1893

JANUARY was top of the year, although, after a strong reaction, there was a good Spring rise. The banking situation then became strained, as eloquently set forth by the loss in surplus de-



## INTEREST RATES AND SURPLUS DEPOSITS 211

posits and rise in interest rates. A great fall in stocks took place into July and the market hung low until the Fall, when surplus deposits began to heap up and there was a good recovery in prices, amounting to about half the loss since January.

1894

SURPLUS deposits were enormous in 1894 and interest rates extremely low. A great bull market might have originated in 1894, were it not that the Democratic party had gained control of the Government and eliminated a large amount of protection from the tariff laws. This proceeding disinclined the public to making any new financial ventures. A bull movement could not have been supported.

1895

SURPLUS deposits were ample and interest rates moderate until the last three months. Heavy buying of stocks for a bull movement took place, and in fact the market started upward. By Fall, prices had risen above the level of the year before. The improvement was checked in December by the famous Venezuelan message to Congress, which brought on a panic-stricken decline into December, cancelling all the gains of the year.

1896

THERE was steady depletion of banking resources in 1896 and surplus deposits fell below zero, while a number of unfortunate influences prevailed, dull times, the Bryan scare in politics, gold exports, and remarkably high rates of interest, etc. The election of McKinley in November changed the aspect of affairs. Stocks were bought for a bull market and the country settled down to a new era of prosperity.

1897

THE firm foundation for a long bull market was laid in 1897 by a great gain in surplus deposits and low interest rates. After a good shake out in April, stocks moved upward with a rush and regained nearly all the ground lost since 1893.

1898

SURPLUS deposits were again enormous and interest rates were low. The War with Spain held the market back for a time; but after July, the swing was toward higher prices. December was high point of the year.

1899

STOCKS rose steadily, with normal reactions until August; but then, surplus deposits were falling and interest rates were extremely high, once in December rising to 186 per cent. British defeats in South Africa and high money led to a strong break in December; but the times were good and this was only a halt in a bull market.

1900

SURPLUS deposits were well above the danger line and loans were made at moderate rates of interest. Those long of stocks were tired out this year instead of being shaken out. In the Fall, the rise was resumed with energy.

1901

A REMARKABLE year, attributed by the astrological fraternity to a conjunction of Jupiter with Saturn, something which happens every thirty years. Stocks boomed. Surplus deposits were large, but interest rates moved higher, not enough, however, to stop the bull market. There were a number of sudden breaks in stocks and the May panic is memorable, but these were due to special causes and not to any danger in the banking situation.

1902

THERE was a great rise in stocks in 1902, but loans at the New York banks gradually attained excessive proportions; and finally, at the end of the year, they were heavier than deposits, a state of affairs which had not existed since 1896. Interest on call loans was prohibitive the latter part of 1902, and time loans

## INTEREST RATES AND SURPLUS DEPOSITS 213

went above the legal rate. It became imperative to reduce loans and prices fell heavily after the great boom in August.

### 1903

THE banks were heavily loaded with loans, and surplus deposits were below zero most of the year. Interest rates were high, and after a handsome January rise, liquidation set in, and stocks fell with only two moderate rallies until August. A smart rally in September was succeeded by another decline.

### 1904

THE banks acquired cash heavily during 1904 and surplus deposits mounted enormously. Call loans were made at nominal rates. A bull market was the logical outcome. The rise began slowly, but gained good headway in the Fall.

### 1905

SURPLUS deposits were ample, the first half of the year, and the stock market rose to the highest level ever known, exceeding 1864. Money was in good supply until the latter part of the year and interest rates moderate. The rise halted in the Fall.

### 1906

THE stock market reached the highest level on record in January, 1906. There were two severe breaks later, one in April after the San Francisco earthquake and one in July. A good rally succeeded into the Fall. The boom in stocks, real estate, and mines, and the intense activity of business gradually brought on genuine financial stringency. Loans at the New York banks became more extended than ever before in history. Several periods of very high money were the consequence. The banks have finally been compelled to ask Congress for a credit currency law, under which a possible issue of \$300,000,000 more national bank notes may be secured.

IN the tables, which succeed, the reader will note the connection between surplus deposits and rates of interest.

HOW MONEY IS MADE

1890.

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 3	4 to 45	5½ to 6½	\$10,000,000	July 4	2 to 9	5½ to 6	\$ 9,500,000
.. 10	2 .. 9	5½ .. 6½	14,000,000	.. 11	3 .. 8	5½ .. 6	13,000,000
.. 17	2 .. 12	5½ .. 6	16,500,000	.. 18	2 .. 6	5 .. 5½	12,000,000
.. 24	3 .. 6	5 .. 5	24,000,000	.. 25	2½ .. 6	5 .. 5	9,000,000
.. 31	2½ .. 7	5 .. 5½	25,000,000	Aug 1	2 .. 6	5 .. 5½	14,000,000
Feb 7	2½ .. 6	5 .. 5½	19,000,000	.. 8	3 .. 20	5 .. 5½	2,000,000
.. 14	3 .. 4½	5 .. 5½	16,000,000	.. 15	3 .. 25	5 .. 5½	-2,500,000
.. 21	2 .. 5	5 .. 5½	13,000,000	.. 22	†3 to 6*†pd	6 .. 6½	-8,000,000
.. 28	2 .. 10	5 .. 5½	9,000,000	.. 29	2 to 15	6 .. 6½	-7,000,000
Mar 7	2 .. 6	5 .. 5½	4,000,000	Sept 5	3 .. 12	6 .. 6½	-6,500,000
.. 14	3 .. 5½	5 .. 5½	6,000,000	.. 12	3 to 6*†pd	6 .. 6½	-10,000,000
.. 21	3 .. 5	5 .. 5½	8,000,000	.. 19	2 to 6*†pd	6 .. 7	-2,500,000
.. 28	2½ .. 5½	5 .. 5½	7,500,000	.. 26	2 to 6	6 .. 6½	12,000,000
Apr 4	3½ .. 8	5½ .. 6	3,500,000	Oct 3	2 .. 6	6 .. 6½	11,000,000
.. 11	2 .. 7	5½ .. 6	3,500,000	.. 10	2½ .. 7	6 .. 6½	.....
.. 18	2 .. 9	5½ .. 6	5,000,000	.. 17	2½ .. 8	6 .. 6½	-2,500,000
.. 25	2½ .. 8	5½ .. 6	5,500,000	.. 24	3 .. 30	6 .. 6½	-3,500,000
May 2	3½ .. 11	5½ .. 6	6,000,000	.. 31	3 .. 25	6 .. 7	-3,500,000
.. 9	4 .. 15	5½ .. 6	4,000,000	Nov 7	2½ to 6*†pd	7 .. 7	-6,500,000
.. 16	2 .. 10	5½ .. 6	6,000,000	.. 14	2 to 6*†pd	7 .. 8	-5,500,000
.. 23	3 .. 10	5½ .. 6	6,000,000	.. 21	2 to 8	7 .. 8	-6,000,000
.. 30	2½ .. 12	5½ .. 6	8,000,000	.. 28	2 to 8	7 .. 9	-9,000,000
June 6	4 .. 12	5½ .. 6	9,000,000	Dec 5	3 .. 15	7 .. 9	-9,000,000
.. 13	3 .. 6	5 .. 5½	9,000,000	.. 12	2 to 6*†pd	7 .. 8	-9,000,000
.. 20	3 .. 10	5½ .. 6	8,000,000	.. 19	2 to 6	6½ .. 8	-6,000,000
.. 27	3 .. 10	5½ .. 6	8,500,000	.. 26	3 .. 6	6½ .. 7½	-3,000,000

† Equal to from 3 to 186 per cent per annum.

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1891.

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 3	3 to 9	6	\$ 1,000,000	July 4	2 to 4	4½ to 6	\$10,500,000
.. 10	2½ .. 6	6	6,500,000	.. 11	1 .. 3	4½ .. 6	10,500,000
.. 17	2 .. 6	5 to 6	15,000,000	.. 18	1 .. 3	5 .. 6	16,000,000
.. 24	2 .. 5	5½ .. 6	20,000,000	.. 25	1 .. 2½	6 .. 6½	16,000,000
.. 31	1½ .. 5	4½ .. 5	21,000,000	Aug 1	1 .. 2	6 .. 6	15,500,000
Feb 7	2 .. 4	4½ .. 5	18,500,000	.. 8	1 .. 2	6 .. 6	13,000,000
.. 14	1½ .. 4	5 .. 5	17,000,000	.. 15	1 .. 4	6 .. 6	11,500,000
.. 21	2 .. 3	5 .. 5	13,000,000	.. 22	1 .. 3	5½ to 6	7,500,000
.. 28	2 .. 4½	4½ to 5	10,500,000	.. 29	2 .. 5	6 .. 6	6,000,000
Mar 7	1 .. 4	5 .. 5	7,500,000	Sept 5	1 .. 5	6 .. 6	2,000,000
.. 14	2 .. 4	5 .. 5	6,500,000	.. 12	2 .. 7	6 .. 6	2,500,000
.. 21	2 .. 4	5 .. 5	6,000,000	.. 19	2 .. 5	6 .. 6	2,000,000
.. 28	2 .. 4	4½ to 5	5,000,000	.. 26	2 .. 25	6 .. 6	-3,000,000
Apr 4	1½ .. 4	4½ to 5	2,500,000	Oct 3	2 .. 12	6 .. 6	-3,000,000
.. 11	2 .. 4	4½ to 5	2,000,000	.. 10	3 .. 6	6 .. 6	1,500,000
.. 18	2 .. 6	4½ to 5	3,000,000	.. 17	3 .. 5	5 to 5½	8,000,000
.. 25	3 .. 5	4½ .. 5½	3,000,000	.. 24	3 .. 3	5 .. 5½	11,000,000
May 2	2½ .. 9	4½ .. 5½	2,500,000	.. 31	3 .. 5	4½ .. 6	10,000,000
.. 9	3 .. 6	5½ .. 6	500,000	Nov 7	3 .. 15	6 .. 6	5,500,000
.. 16	2½ .. 7	6 .. 6	.....	.. 14	3 .. 3	5 to 5½	8,500,000
.. 23	3 .. 6	6 .. 6	-1,500,000	.. 21	3 .. 5	4 .. 5½	13,500,000
.. 30	2½ .. 6	5½ to 6	-2,000,000	.. 28	2½ .. 4½	4 .. 5	15,000,000
June 6	2½ .. 5	5½ to 6	-2,500,000	Dec 5	2 .. 6	4 .. 5	16,000,000
.. 13	2 .. 5	5½ to 6	.....	.. 12	2 .. 3½	5 .. 5½	18,500,000
.. 20	1 .. 4	4½ .. 6	8,500,000	.. 19	2 .. 3	4 .. 5	23,500,000
.. 27	1 .. 3	4½ .. 6	12,000,000	.. 26	2 .. 4½	4 .. 5	26,000,000

HOW MONEY IS MADE

1892

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 2	2 to 5	4 1/2	\$27,500,000	July 2	1 1/2 to 2	3 to 4	\$40,000,000
.. 9	1 1/2 .. 4	4 to 4 1/2	33,000,000	.. 9	1 1/2 .. 4	3 1/2 .. 4	38,500,000
.. 16	1 .. 3	4 .. 4 1/2	40,500,000	.. 16	1 .. 3	3 1/2 .. 4	41,000,000
.. 23	1 .. 2 1/2	3 1/2 .. 4	50,000,000	.. 23	1 .. 2	3 .. 4	43,500,000
.. 30	1 .. 2 1/2	3 .. 4	56,000,000	.. 30	1 .. 2	3 .. 4	44,000,000
Feb 6	1 .. 2 1/2	3 .. 4	54,500,000	Aug 6	1 .. 2	3 .. 4	39,500,000
.. 13	1 .. 2	3 1/2 .. 4 1/2	55,000,000	.. 13	1 .. 2	3 .. 3 1/2	35,500,000
.. 20	1 1/2 .. 2	3 1/2 .. 4	54,500,000	.. 20	1 1/2 .. 2	3 .. 4	32,000,000
.. 27	1 1/2 .. 2	3 1/2 .. 4	51,000,000	.. 27	1 1/2 .. 2 1/2	4 .. 4 1/2	26,500,000
Mar 5	1 1/2 .. 2	3 1/2 .. 5	45,000,000	Sept 3	2 .. 6	4 .. 4 1/2	22,000,000
.. 12	1 1/2 .. 2	4 .. 4 1/2	39,000,000	.. 10	2 1/2 .. 5	5 .. 6	18,000,000
.. 19	1 1/2 .. 2	4 .. 4 1/2	39,500,000	.. 17	4 .. 5	5 1/2 .. 6	16,500,000
.. 26	1 1/2 .. 2	4 .. 4	39,500,000	.. 24	3 .. 4	5 .. 5 1/2	14,000,000
Apr 2	1 1/2 .. 2	3 1/2 .. 4	38,500,000	Oct 1	3 .. 6	4 1/2 .. 5	11,500,000
.. 9	1 1/2 .. 2	3 1/2 .. 4	37,000,000	.. 8	4 .. 10	5 .. 6	9,000,000
.. 16	1 1/2 .. 2	3 .. 3 1/2	38,000,000	.. 15	4 1/2 .. 10	6 .. 6	8,500,000
.. 23	1 1/2 .. 2	3 .. 4	42,000,000	.. 22	4 .. 8	6 .. 6	8,500,000
.. 30	1 1/2 .. 2	3 .. 4	42,500,000	.. 29	3 .. 7	6 .. 6	8,000,000
May 7	1 .. 2	3 .. 4	38,000,000	Nov 5	5 .. 8	6 .. 6	6,500,000
.. 14	1 .. 2	2 1/2 .. 4	38,500,000	.. 12	4 .. 6	6 .. 6	5,500,000
.. 21	1 .. 2	2 1/2 .. 4	43,500,000	.. 19	4 .. 6	5 to 5 1/2	5,000,000
.. 28	1 .. 2	3 .. 3 1/2	47,000,000	.. 26	3 .. 6	5 .. 5 1/2	9,500,000
June 4	1 .. 1 1/2	2 1/2 .. 3 1/2	49,500,000	Dec 3	4 .. 6	5 1/2 .. 6	10,000,000
.. 11	1 .. 1 1/2	2 1/2 .. 3	48,500,000	.. 10	4 .. 5 1/2	5 .. 5 1/2	8,500,000
.. 18	1 .. 1 1/2	3 .. 3 1/2	50,000,000	.. 17	4 .. 25	6 .. 6	7,000,000
.. 25	1 .. 2	3 1/2 .. 4	43,000,000	.. 24	3 .. 40	6 .. 6	6,000,000
				.. 31	4 .. 10	6 .. 6	6,500,000

INTEREST RATES AND SURPLUS DEPOSITS 217

1893

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 7	4 to 7	6	\$14,000,000	July 8	3 to 25	6 + 1/2 com.	\$20,000,000
.. 14	2 1/2 .. 6	5	23,000,000	.. 15	3 .. 20	6 + com.	-19,000,000
.. 21	2 1/2 .. 5	4 1/2 to 5	33,000,000	.. 22	7 .. 11	6 + 1/2 com.	-18,500,000
.. 28	2 1/2 .. 5	4	33,500,000	.. 29	2 .. 7 1/2	6 + 4 p. c.	-24,000,000
Feb 4	1 .. 3	3 1/2 .. 4	30,500,000	Aug 5	2 .. 5 1/2	6 + com.	-36,000,000
.. 11	1 1/2 .. 5	4 .. 5	27,500,000	.. 12	2 .. 6	6 + com.	-39,000,000
.. 18	2 .. 6	4 1/2 .. 5	21,000,000	.. 19	2 .. 6	6 + com.	-36,000,000
.. 25	2 1/2 .. 12	5 .. 5 1/2	14,000,000	.. 26	3 .. 7	6 + com.	-33,000,000
Mar 4	3 .. 12	6	9,000,000	Sept 2	2 .. 6	6	-26,000,000
.. 11	3 .. 60	6	2,500,000	.. 9	2 .. 5	6	-23,000,000
.. 18	2 .. 20	6	2,500,000	.. 16	3 .. 7	6	-15,500,000
.. 25	1 1/2 .. 7	6	5,000,000	.. 23	2 .. 5	6	-8,000,000
Apr 1	3 .. 25	6	6,000,000	.. 30	2 .. 5	6	-1,500,000
.. 8	3 .. 7	6	4,500,000	Oct 7	1 1/2 .. 3	6	6,500,000
.. 15	3 .. 5	6	8,000,000	.. 14	1 1/2 .. 3	5 to 6	18,000,000
.. 22	3 .. 15	6	11,000,000	.. 21	1 .. 3	5 .. 6	27,500,000
.. 29	3 .. 12	6	6,000,000	.. 28	1 .. 2 1/2	5	36,000,000
May 6	4 .. 40	6	8,000,000	Nov 4	1 .. 2	4 .. 5 1/2	45,000,000
.. 13	1 .. 7	6	14,000,000	.. 11	1 .. 2	4 .. 5 1/2	52,500,000
.. 20	2 .. 5	6	21,500,000	.. 18	1 .. 1 1/2	3 .. 4	63,000,000
.. 27	2 .. 3	6	20,500,000	.. 25	1 .. 1 1/2	2 1/2 .. 4	70,000,000
June 3	2 .. 5	4 1/2 to 5 1/2	14,500,000	Dec 1	1 .. 1 1/2	2 1/2 .. 4	78,000,000
.. 10	2 .. 12	5 .. 6	4,500,000	.. 8	1 .. 1 1/2	3 1/2 .. 4	80,500,000
.. 17	4 .. 25	6 + 2 p. c.	-4,000,000	.. 16	1 .. 3 1/2	3 .. 3 1/2	80,000,000
.. 24	3 .. 25	6 + 2 p. c.	-8,000,000	.. 23	1 .. 1 1/2	3 .. 3 1/2	82,500,000
July 1	4 .. 7 1/2	6 + 1 p. c.	-15,000,000	.. 30	1 1/2 .. 1 1/2	2 1/2 .. 4	88,500,000

HOW MONEY IS MADE

1894

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 6	1 to 1	3 to 4	\$ 99,500,000	July 7	1	2½ to 3	\$104,500,000
13	1 to 1	2½ to 3	109,500,000	14	1	2 to 3	106,500,000
20	1 to 1	2 to 3	122,500,000	21	1	2½ to 3	106,500,000
27	1 to 1	2 to 3	129,000,000	28	1	2 to 3	102,500,000
Feb 3	1 to 1	3 to 4	132,000,000	Aug 4	1	2½ to 3½	99,000,000
10	1 to 1	2 to 3	101,500,000	11	1	2 to 3	96,500,000
17	1 to 1	3	90,500,000	18	1	3 to 4	98,500,000
24	1 to 1	3	91,500,000	25	1	3 to 4	97,000,000
Mch 3	1 to 1	2 to 4	92,000,000	Sept 1	1	3 to 4	96,000,000
10	1 to 1	3	93,000,000	8	1	3 to 3½	92,000,000
17	1 to 1	2½ to 3	97,000,000	15	1	3 to 3½	91,500,000
24	1 to 1	3	99,000,000	22	1	2 to 4	90,000,000
31	1 to 1	2 to 3	104,000,000	29	1	2 to 3	89,000,000
Apr 7	1 to 1	2 to 3	104,000,000	Oct 6	1	3	89,000,000
14	1 to 1	3	106,000,000	13	1 to 1	2 to 3	90,500,000
21	1 to 1	3	100,500,000	20	1 to 1	2 to 3	94,000,000
28	1 to 1	3	113,000,000	27	1 to 1	2 to 3	94,500,000
May 5	1 to 1	3	113,500,000	Nov 3	1 to 1	2 to 3	94,000,000
12	1 to 1	2 to 3	111,500,000	10	1 to 1	2 to 3	92,500,000
19	1 to 1	2 to 3	111,000,000	17	1 to 1	2 to 3	95,000,000
26	1 to 1	2 to 3	107,500,000	24	1 to 3	2 to 3	97,000,000
June 2	1 to 1	2 to 3	107,000,000	Dec 1	1 to 1½	2 to 3	80,000,000
9	1 to 1	2 to 3	105,000,000	8	1 to 2	2 to 3	58,000,000
16	1 to 1	2 to 3	104,500,000	15	1 to 2	2 to 3	56,000,000
23	1 to 1	2 to 3	105,000,000	22	1 to 1	2 to 3	56,000,000
30	1 to 1	2 to 3	103,000,000	29	1 to 1	2 to 3	53,500,000



INTEREST RATES AND SURPLUS DEPOSITS 219

1895

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 5	1 to 1½	3 to 3½	\$59,500,000	July 6	1 to 3	2½ to 3	\$56,000,000
.. 12	1 .. 1½	3 .. 3½	65,500,000	.. 13	1 .. 1½	3 to 3½	51,000,000
.. 19	1 .. 1½	2½ .. 3	72,000,000	.. 20	1 .. 1½	3 to 3½	61,000,000
.. 26	1 .. 1½	3 .. 4	69,000,000	.. 27	1 .. 1½	2½ .. 3	64,500,000
Feb 2	1½ .. 3	3½ .. 4	56,500,000	Aug 3	1 .. 1½	2½ .. 3	65,000,000
.. 9	1 .. 2	4 .. 4½	50,000,000	.. 10	1 .. 1½	2½ .. 3	62,500,000
.. 16	1 .. 2½	4 .. 4½	49,000,000	.. 17	1 .. 1½	2½ .. 3	66,000,000
.. 23	1 .. 4	4 .. 4½	46,000,000	.. 24	1 .. 1	2½ .. 3	60,000,000
Mch 2	1 .. 5	4½ .. 5	44,000,000	.. 31	1 .. 1	2½ .. 3	61,500,000
.. 9	1½ .. 3	4 .. 4½	38,500,000	Sept 7	1 to 3	2½ .. 3½	58,500,000
.. 16	1½ .. 3	4 .. 5	29,000,000	.. 14	1 to 3	3 .. 4	49,000,000
.. 23	1½ .. 3	4 .. 4½	24,500,000	.. 21	1½ .. 3	3 .. 4	41,000,000
.. 30	2 .. 3	4 .. 4½	21,500,000	.. 28	1½ .. 3	3½ .. 4	37,500,000
Apr 6	2 .. 3	4 .. 5	20,000,000	Oct 5	1 .. 2½	3 .. 4	30,000,000
.. 13	2 .. 3	4 .. 4½	22,500,000	.. 12	2 .. 2½	3 .. 4	26,500,000
.. 20	1½ .. 2½	3½ .. 4½	29,500,000	.. 19	2 .. 2½	3 .. 4	27,500,000
.. 27	1½ .. 2	3 .. 3½	36,000,000	.. 26	2 .. 2½	3 .. 4	28,000,000
May 4	1 .. 2	3 .. 3½	42,000,000	Nov 2	2 .. 2½	3 .. 4	29,000,000
.. 11	1 .. 1½	3 .. 3½	48,000,000	.. 9	2 .. 2½	3 .. 4	32,000,000
.. 18	1 .. 1½	2½ .. 3	58,000,000	.. 16	1½ .. 2	3 .. 4	33,000,000
.. 25	1 .. 1½	2 .. 3	62,000,000	.. 23	1½ .. 2	3 .. 4	32,500,000
June 1	1 .. 1½	2 .. 3	63,500,000	.. 30	1½ .. 2½	3 .. 4	30,500,000
.. 8	1 .. 1½	2 .. 3	62,500,000	Dec 7	1½ .. 3	3 .. 4	32,000,000
.. 15	1 .. 1½	2 .. 3	60,500,000	.. 14	1½ .. 2½	3 .. 4	30,000,000
.. 22	1 .. 1½	2 .. 3	61,500,000	.. 21	1 .. 1.100	4 .. 5	27,500,000
.. 29	1 .. 1½	2 .. 3	57,000,000	.. 28	3 .. 50	6	22,500,000

## HOW MONEY IS MADE

1898

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 4	3 to 35	6	\$26,000,000	July 11	1 to 2	3½ to 4½	\$26,000,000
11	1 .. 8	6	33,000,000	18	1½ .. 3	4 .. 4½	26,000,000
18	2 .. 6	6	48,500,000	25	1½ .. 3	4½ .. 6	19,000,000
Feb 1	3 .. 4½	6	42,000,000	Aug 1	1½ .. 2½	5 .. 6	15,300,000
8	2½ .. 8	6	43,000,000	8	1½ .. 6	6	9,000,000
15	2½ .. 7	6	44,000,000	15	2 .. 8	6 to 6+com	2,500,000
22	3 .. 4	6	41,500,000	22	3 .. 6	7 to 8	-600,000
29	3 .. 5	4½ to 6	32,000,000	29	3 .. 15	8	-3,500,000
Mch 7	3 .. 4	4½ to 5	27,000,000	Sept 5	3 .. 12	7 to 8	-6,000,000
14	3 .. 4½	4½ .. 4½	24,000,000	12	4 .. 6	7 .. 8	-7,000,000
21	2½ .. 4½	4½	23,000,000	19	3 .. 8	6+com	-6,000,000
28	3 .. 3½	4½ to 5	20,500,000	26	3 .. 6	6 to 7	-2,000,000
Apr 4	3 .. 4½	4½ .. 5	17,000,000	Oct 3	3 .. 6	6	1,500,000
11	3 .. 4	4½ .. 5	16,500,000	10	3 .. 12	6	2,000,000
18	2½ .. 3½	4½	17,500,000	17	2 .. 9	7 to 9	-2,500,000
25	2½ .. 3	4 to 4½	18,000,000	24	3 .. 10	7 .. 10	2,000,000
May 2	2 .. 3	4 to 4½	20,000,000	31	6 .. 127	{ Unwilling to lend at all }	-1,500,000
9	2 .. 4	3 .. 4	24,500,000	Nov 7	4 .. 96	5	-3,500,000
16	2½ .. 3½	3 .. 4	21,000,000	14	3 .. 5	4½ to 5	9,000,000
23	2 .. 2½	3½ .. 4½	21,500,000	21	2½ .. 4	4½ to 4	21,000,000
30	1½ .. 2½	3 .. 4½	23,500,000	28	1 .. 3	3½ .. 4	27,000,000
June 6	1½ .. 2	3 .. 4	23,500,000	Dec 5	1 .. 2	3 .. 3½	29,500,000
13	1½ .. 2	3 .. 4	20,500,000	12	1½ .. 2	3 .. 3½	33,000,000
20	2 .. 2	3 .. 4	22,500,000	19	1½ .. 2	3 .. 3½	36,500,000
27	1½ .. 2	3½ .. 4	20,500,000	26	1½ .. 2	3 .. 4	38,000,000
July 4	2 .. 4	3 .. 4	21,000,000	31	1½ .. 2½	3½ .. 4	39,000,000

INTEREST RATES AND SURPLUS DEPOSITS 221

1897

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 9	1½ to 2	3 to 3½	\$59,000,000	July 10	1 to 1½	2½ to 3	\$74,000,000
.. 16	1½ .. 2	2½ .. 3	66,000,000	.. 17	1 .. 1½	2½ .. 3	79,000,000
.. 23	1 .. 2	2½ .. 3	73,000,000	.. 24	1 .. 1½	2½ .. 3	82,500,000
.. 30	1 .. 2	2½ .. 3	74,500,000	.. 31	2 .. 2½	2½ .. 3	80,000,000
Feb 6	1½ .. 2	3 .. 3½	71,500,000	Aug 7	1 .. 1½	2½ .. 3	76,500,000
.. 13	1½ .. 2	3 .. 3½	67,500,000	.. 14	1 .. 1½	3 .. 3½	75,000,000
.. 20	1½ .. 2	3 .. 3½	74,000,000	.. 21	1 .. 2	3 .. 3½	77,000,000
.. 27	1½ .. 2	3 .. 3½	76,000,000	.. 28	1½ .. 1½	3 .. 3½	76,000,000
Mar 6	1½ .. 1½	2½ .. 3	75,000,000	Sept 4	1 .. 1½	3 .. 4	72,500,000
.. 13	1½ .. 2	3 .. 3½	72,500,000	.. 11	1½ .. 1½	3 .. 4	67,500,000
.. 20	1½ .. 2	3 .. 3½	68,000,000	.. 18	1½ .. 2½	3 .. 4½	56,500,000
.. 27	1½ .. 2	3 .. 3½	67,000,000	.. 25	2 .. 4	3½ .. 4½	48,500,000
Apr 3	1½ .. 2	3 .. 3½	66,500,000	Oct 2	2 .. 4½	4 .. 4½	47,000,000
.. 10	1½ .. 2	3 .. 3½	65,500,000	.. 9	2½ .. 3½	4 .. 4½	45,000,000
.. 17	1½ .. 1½	3 .. 3½	65,000,000	.. 16	2 .. 3	4 .. 4	47,000,000
.. 24	1½ .. 1½	3 .. 3½	70,000,000	.. 23	2 .. 2½	3½ to 4	55,000,000
May 1	1½ .. 1½	3 .. 3½	71,000,000	.. 30	1½ .. 2½	3 .. 4	58,000,000
.. 8	1½ .. 1½	3 .. 3½	65,500,000	Nov 6	1½ .. 2	3 .. 3½	60,000,000
.. 15	1½ .. 1½	3 .. 3½	67,000,000	.. 13	1½ .. 2	3 to 3½	63,000,000
.. 22	1½ .. 1½	3 .. 3½	67,000,000	.. 20	1½ .. 2	3 .. 3½	65,500,000
.. 29	1½ .. 1½	3 .. 3	68,000,000	.. 27	1½ .. 2	3 .. 3½	68,500,000
June 5	1 .. 1½	2½ .. 3	70,000,000	Dec 4	1½ .. 2	3 .. 3½	67,500,000
.. 12	1 .. 1½	2½ .. 3	71,500,000	.. 11	1½ .. 2	3 .. 4	63,000,000
.. 19	1 .. 1½	2½ .. 3	74,000,000	.. 18	2 .. 4	4 .. 4	58,500,000
.. 26	1 .. 2	2½ .. 3	75,500,000	.. 25	2 .. 5½	4 .. 4	63,000,000
July 3	1 .. 2	2½ .. 3	72,000,000	.. 31	2 .. 4½	3½ to 4	68,000,000

HOW MONEY IS MADE

1898

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 7	2 to 6	3½ to 4	\$76,000,000	July 8	1½ to 2	3 to 3½	\$124,500,000
.. 14	2½ .. 2½	3 to 3½	80,000,000	.. 15	1 .. 1	3 .. 3	118,000,000
.. 21	1½ .. 2½	3 to 3½	91,000,000	.. 22	1 .. 1	3 .. 3	106,500,000
.. 28	1½ .. 2	3	96,500,000	.. 29	1 .. 1	3 .. 3	105,000,000
Feb 4	1½ .. 2	3	100,000,000	Aug 5	1½ .. 1½	3 .. 3	107,500,000
.. 11	1 .. 2	3	99,000,000	.. 12	1½ .. 5	3 .. 3	101,000,000
.. 18	1 .. 1½	3	91,500,000	.. 19	1½ .. 2	3 .. 3	98,500,000
.. 25	1½ .. 4	4	87,500,000	.. 26	1½ .. 3	3½ .. 4	80,000,000
Mar 4	1½ .. 2½	4	78,000,000	Sept 2	2 .. 3	3½ .. 4	88,000,000
.. 11	1½ .. 3	4 to 6	77,500,000	.. 9	2 .. 4	4 .. 4	66,500,000
.. 18	1½ .. 2½	4½ to 5	81,000,000	.. 16	2 .. 5	4 to 4½	59,000,000
.. 25	1½ .. 2½	4½ .. 5	85,500,000	.. 23	2 .. 6	4 .. 4½	58,000,000
.. 31	1½ .. 2½	4½ .. 6	86,500,000	.. 30	2 .. 6½	4 .. 4½	66,500,000
Apr 1	1½ .. 5	4 .. 6	82,000,000	Oct 7	1½ .. 4	3 .. 3	74,500,000
.. 8	1½ .. 4	5 .. 6	83,500,000	.. 14	2 .. 3	3 .. 3	80,500,000
.. 15	2 .. 4	5½ .. 6	88,500,000	.. 21	1½ .. 2½	3 .. 3	88,500,000
.. 22	1½ .. 3½	6	88,500,000	.. 28	1½ .. 2	3 .. 3	94,000,000
.. 29	1½ .. 4	5	88,500,000	Nov 4	1½ .. 2	3 .. 3	90,500,000
May 6	2 .. 4	4½ to 5	93,000,000	.. 11	1½ .. 4	3 .. 3	90,000,000
.. 13	1½ .. 3	4½ to 4	99,000,000	.. 18	1½ .. 2½	3 to 3½	92,500,000
.. 20	1½ .. 1½	3 .. 3	106,500,000	.. 25	2 .. 2½	3 .. 3	91,000,000
.. 27	1 .. 1½	3 .. 3	108,000,000	Dec 2	2 .. 2½	3 .. 3	91,500,000
June 3	1 .. 1½	3 .. 3	112,500,000	.. 9	2 .. 2	3 .. 3	94,500,000
.. 10	1 .. 1½	3 .. 3	120,500,000	.. 16	2 .. 3	3 .. 3	98,500,000
.. 17	1 .. 1½	3 .. 3	125,000,000	.. 23	2 .. 4½	3 .. 3	102,500,000
.. 24	1 .. 1½	3 .. 3	129,000,000	.. 30	2 .. 6	3 to 3½	104,500,000
July 1	1 .. 1½	3 .. 3					

INTEREST RATES AND SURPLUS DEPOSITS 223

1899

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 6	2½ to 6	3	\$113,000,000	July 7	2 to 6	3½ to 4	\$109,000,000
Jan 13	2 .. 3	3	119,000,000	.. 14	3 .. 7	4½	110,000,000
.. 20	2 .. 3	3	129,000,000	.. 21	2 .. 4½	3½ .. 4½	107,000,000
.. 27	2½ .. 3	3	135,000,000	.. 28	2½ .. 4	4 .. 4½	102,500,000
Feb 3	2 .. 3	3	138,500,000	Aug 4	3 .. 5	4½ .. 5	97,000,000
.. 10	2 .. 3	3 to 3½	138,000,000	.. 11	2½ .. 4	4½ .. 5	103,000,000
.. 17	2 .. 3	3½	138,500,000	.. 18	2 .. 4	4½ .. 5	103,500,000
.. 24	2 .. 3	3½	139,000,000	.. 25	2 .. 4	4 .. 4½	101,500,000
Mch 3	1 .. 4½	3½ to 4	134,000,000	Sept 1	2½ .. 6	4½ .. 5	96,000,000
.. 10	2 .. 6	3½ .. 4	129,000,000	.. 8	2 .. 6	4½ .. 5	86,500,000
.. 17	2½ .. 9	4	125,000,000	.. 15	2 .. 10	4½ .. 6	79,500,000
.. 24	3 .. 12	4½ to 4	122,500,000	.. 22	2 .. 10	5½ .. 6	76,500,000
.. 31	3½ .. 16	4 .. 4½	119,000,000	.. 29	3 .. 20	5½ .. 6	71,000,000
Apl 7	3 .. 8	4 .. 4½	116,000,000	Oct 6	3 .. 40	6	70,500,000
.. 14	3 .. 6	4 .. 4½	120,000,000	.. 13	2 .. 19	6	69,000,000
.. 21	3 .. 6	4 .. 4½	123,500,000	.. 20	4 .. 9	5 to 5½	67,500,000
.. 28	3 .. 7	3½ .. 4	123,000,000	.. 27	4 .. 35	6	66,000,000
May 5	2½ .. 4	3½ to 4	130,500,000	Nov 3	2 .. 16	6	56,500,000
.. 12	2 .. 4	3½ to 4	138,500,000	.. 10	2 .. 12	6	57,000,000
.. 19	2 .. 4	3 .. 3½	144,000,000	.. 17	3 .. 14	6	61,000,000
.. 26	2 .. 3	3 .. 3½	143,500,000	.. 24	3 .. 10	6	66,000,000
Jun 2	1½ .. 2½	3 .. 3½	134,000,000	Dec 1	3 .. 12	6	62,500,000
.. 9	2 .. 3	3 .. 3½	134,000,000	.. 8	3 .. 15	6	63,000,000
.. 16	2 .. 2½	3 .. 3½	131,000,000	.. 15	4 .. 186	6	67,000,000
.. 23	1½ .. 2½	3 .. 3	119,000,000	.. 22	2 .. 2½	6	66,500,000
.. 30	2 .. 15	3 .. 3	119,000,000	.. 29	2½ .. 25	6	66,500,000

HOW MONEY IS MADE

1900

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 5	2 to 12	6 6	\$71,000,000	July 6	1 1/2 to 1 1/2	3 1/2 to 4 1/2	\$79,000,000
.. 12	3 .. 6	5 to 5	73,000,000	.. 13	1 1/2 .. 1 1/2	3 1/2 .. 4	82,000,000
.. 19	.. 4 1/2	4 to 5	84,500,000	.. 20	1 .. 1	3 1/2 .. 4 1/2	84,500,000
.. 26	2 .. 4	4 to 4 1/2	92,000,000	.. 27	1 1/2 .. 1 1/2	4 .. 4 1/2	86,500,000
Feb 2	2 .. 3	4 .. 4	96,000,000	Aug 3	1 1/2 .. 1 1/2	4 .. 4 1/2	90,500,000
.. 9	2 .. 2 1/2	4 .. 4	94,000,000	.. 10	1 .. 1	4 .. 4 1/2	89,000,000
.. 16	2 .. 2 1/2	4 to 4 1/2	86,500,000	.. 17	1 .. 2	4 .. 4 1/2	79,500,000
.. 23	1 1/2 .. 2 1/2	4 1/2 .. 5	81,000,000	.. 24	1 1/2 .. 1 1/2	4 .. 4 1/2	84,000,000
Mar 2	2 .. 2 1/2	4 1/2 .. 5	75,000,000	.. 31	1 1/2 .. 1 1/2	4 .. 4 1/2	86,500,000
.. 9	2 .. 4	4 1/2 .. 5	68,000,000	Sept 7	1 1/2 .. 1 1/2	4 .. 4	87,500,000
.. 16	3 .. 7	5 .. 5	62,000,000	.. 14	1 .. 2	4 .. 4	81,500,000
.. 23	3 .. 6	4 to 5	60,500,000	.. 21	1 1/2 .. 2	4 1/2 to 4 1/2	74,000,000
.. 30	2 .. 4 1/2	4 .. 4 1/2	65,000,000	.. 28	1 1/2 .. 2	4 1/2	67,000,000
Apr 6	3 .. 5	4 to 4	67,000,000	Oct 5	2 .. 3	5	60,500,000
.. 13	2 1/2 .. 4	4 .. 4	72,500,000	.. 12	1 1/2 .. 4	5	53,500,000
.. 20	2 .. 4	3 1/2 .. 4	75,000,000	.. 19	2 1/2 .. 4	4 1/2	48,500,000
.. 27	2 .. 2 1/2	3 1/2 .. 4	77,500,000	.. 26	2 .. 6	5	50,000,000
May 4	1 1/2 .. 2 1/2	3 1/2 .. 4	81,500,000	Nov 3	3 .. 20	4 1/2 to 5	49,000,000
.. 11	2 .. 2 1/2	3 1/2 .. 4	79,500,000	.. 9	1 .. 25	4 1/2 to 5	45,500,000
.. 18	1 1/2 .. 2 1/2	3 1/2 .. 4	80,000,000	.. 16	2 .. 5	4 1/2 .. 5	52,000,000
.. 25	1 1/2 .. 2 1/2	3 .. 4	83,500,000	.. 23	2 .. 6	4 1/2 .. 5	58,500,000
June 1	1 1/2 .. 2	3 1/2 .. 4	87,500,000	.. 30	3 .. 4 1/2	4 1/2 .. 5	60,000,000
.. 8	1 1/2 .. 2	3 1/2 .. 4	87,000,000	Dec 7	3 .. 6	4 1/2 .. 5	54,500,000
.. 15	1 .. 1 1/2	3 .. 4	85,500,000	.. 14	3 .. 6	4 1/2 .. 5	50,000,000
.. 22	1 .. 1 1/2	3 1/2 .. 4 1/2	81,000,000	.. 21	3 1/2 .. 6 1/2	4 1/2 .. 5	51,500,000
.. 29	1 .. 2	3 .. 4 1/2	79,500,000	.. 28	3 .. 6	4 1/2 .. 5	57,500,000

INTEREST RATES AND SURPLUS DEPOSITS 225

1901

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 4	3½ to 6	4½ to 4½	\$67,000,000	July 5	4 to 25	4 to 4½	\$76,000,000
.. 11	2½ .. 5	4 to 4	78,000,000	.. 12	1 .. 8	4½ .. 5	78,000,000
.. 18	2 .. 5	4 to 4	91,000,000	.. 19	1 .. 5	4½ .. 5	83,000,000
.. 25	1½ .. 2½	3½ to 3½	94,000,000	.. 26	2 .. 3	4½ .. 5	75,000,000
Feb 1	1½ .. 2	3 to 3	96,000,000	Aug 2	2 .. 4	4½ to 5	77,000,000
.. 8	1½ .. 2½	3½ .. 4	99,000,000	.. 9	2 .. 2½	4½ .. 5	79,000,000
.. 15	1½ .. 2½	3½ .. 4	97,000,000	.. 16	2 .. 3	4½ .. 5	80,000,000
.. 22	1½ .. 2½	3½ .. 4	98,000,000	.. 23	2 .. 3	4½ .. 5	81,000,000
.. 29	1½ .. 2½	3 .. 3½	98,000,000	.. 30	2 .. 3	4½ .. 5	73,000,000
Mar 1	1½ .. 3	3 .. 3½	93,000,000	Sept 6	3 .. 4½	4½ .. 5	62,000,000
.. 8	2 .. 3	3 .. 3½	92,000,000	.. 13	3 .. 10	5 .. 5½	59,000,000
.. 15	2 .. 2½	3 .. 3½	90,000,000	.. 20	1½ .. 6	5 .. 5	65,000,000
.. 22	2 .. 3	3 .. 3½	88,000,000	.. 27	2½ .. 4½	4½ to 5	69,000,000
.. 29	2 .. 6	3½ to 4	81,000,000	Oct 4	2 .. 4½	4½ .. 5	70,000,000
Apr 5	2 .. 7	3½ to 4	79,000,000	.. 11	3 .. 4	4½ .. 4½	73,000,000
.. 12	3 .. 6	4 to 4	85,000,000	.. 18	3 .. 4	4½ .. 4½	72,000,000
.. 19	2½ .. 6	4 to 4½	86,000,000	.. 25	3 .. 4	4½ to 5	69,000,000
.. 26	3 .. 5	4 to 4½	83,000,000	Nov 1	3 .. 5	4½ .. 5	67,000,000
May 3	3 .. 7½	4 to 4½	80,000,000	.. 8	3 .. 4	4½ .. 5	65,000,000
.. 10	3 .. 8	4 to 4½	78,000,000	.. 15	3 .. 5	4½ to 5	65,000,000
.. 17	2 .. 7	4 to 4½	83,000,000	.. 22	3 .. 5	4½ .. 5	64,000,000
.. 24	2 .. 4	4 to 4	86,000,000	.. 29	3½ .. 4½	4½ .. 4½	65,000,000
.. 31	2 .. 4½	4 to 4	85,000,000	Dec 6	3 .. 12	4½ to 4½	57,000,000
June 7	2½ .. 4½	3½ to 4	84,000,000	.. 13	3 .. 10	5 .. 5	53,000,000
.. 14	2½ .. 5	3½ to 4	80,000,000	.. 20	2½ .. 9	5 .. 5	47,000,000
.. 21	3 .. 15	4 to 4	79,000,000	.. 27	2½ .. 9	5 .. 5	53,000,000
.. 28	3½ .. 15	4 to 4					

1902

Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans
5 to 15	5 to 5½	\$56,500,000	July 4	3 to 7	
4 .. 7	4½ .. 5	62,500,000	.. 11	3 .. 6	
3 .. 4	4½	71,000,000	.. 18	2 .. 4	4½ to 5
2 .. 4	4½	79,500,000	.. 25	2½ .. 3	4½
2 .. 3	4½	86,000,000	Aug 1	2½ .. 3	4½
2½ .. 3	4½ to 5	82,000,000	.. 8	2½ .. 3	4½
2 .. 3	4 .. 4½	82,000,000	.. 15	3 .. 6	4½
2 .. 2½	4 .. 4½	82,500,000	.. 22	3 .. 5	4½
2 .. 2½	4 .. 4½	79,000,000	.. 29	3 .. 5	5 to 6
2½ .. 3	4 .. 4½	70,500,000	Sept 5	3½ .. 5	5½
3 .. 4½	4½ .. 4½	63,500,000	.. 12	5 .. 20	
3 .. 5	4½ .. 4½	60,500,000	.. 19	4 .. 20	
3 .. 5	4½ .. 4½	61,000,000	.. 26	2 .. 25	
2½ .. 4½	4 .. 4	57,000,000	Oct 3	3 .. 35	6 to 6
3 .. 7	4 to 4½	57,000,000	.. 10	3 .. 16	6
3½ .. 6	4 to 4½	58,000,000	.. 17	5 .. 18	
3½ .. 6	4 to 4½	61,000,000	.. 24	2½ .. 6½	



INTEREST RATES AND SURPLUS DEPOSITS 227

1903

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 2	3 to 15	5 to 6	2,200,000	July 3	2 to 10	4½ to 5½	-13,500,000
.. 9	3 .. 5	5 to 5½	2,000,000	.. 10	2 .. 4½	4½ to 5	-17,000,000
.. 16	2½ .. 4½	4½ .. 5	5,000,000	.. 17	2 .. 4½	5 .. 6	-12,000,000
.. 23	2½ .. 4½	4½ .. 5	13,000,000	.. 24	1½ .. 3	5½ .. 6	-5,500,000
.. 30	2½ .. 4	4½ .. 5	27,000,000	.. 31	1 .. 3	4½ .. 5½	1,000,000
Feb 6	2 .. 3½	4½ .. 5	15,000,000	Aug 7	1½ .. 3½	5 .. 5½	-400,000
.. 13	2 .. 3½	4½ .. 5	16,000,000	.. 14	1 .. 3	5 .. 6	-5,000,000
.. 20	2 .. 3	4½ .. 5	13,000,000	.. 21	1½ .. 3	5 .. 6	-4,000,000
.. 27	2 .. 4	4½ .. 5	6,000,000	.. 28	1½ .. 2	5½ .. 6	-3,000,000
Mar 6	3 .. 6	5 .. 5½	-3,000,000	Sept 4	1½ .. 2½	5½ .. 6	-6,000,000
.. 13	2½ .. 8	5½ .. 5½	-8,000,000	.. 11	2 .. 2½	5½ .. 6	-8,000,000
.. 20	4 .. 7	5½ .. 5½	-11,000,000	.. 18	2 .. 3	5½ .. 5½	-12,500,000
.. 27	3½ .. 15	5 .. 5½	-5,000,000	.. 25	2 .. 4	5½ .. 6	-15,500,000
Apr 3	5 .. 11	5 .. 5	-8,000,000	Oct 2	2 .. 3½	5 .. 5½	-15,500,000
.. 10	2½ .. 6	4½ to 5	-8,000,000	.. 9	2 .. 2½	4½ .. 5	-15,500,000
.. 17	2 .. 4½	4½ to 4½	-8,000,000	.. 16	1½ .. 2½	4½ .. 5	-16,500,000
.. 24	2 .. 3	4½ .. 4½	-8,500,000	.. 23	1½ .. 2½	4½ .. 5	-17,000,000
May 1	2 .. 2½	4½ .. 4½	-7,000,000	.. 30	2½ .. 6	5 .. 5	-26,000,000
.. 8	2 .. 2½	4 to 4½	-8,000,000	Nov 6	2 .. 6	5½ .. 6	-32,000,000
.. 15	2 .. 3	4 .. 5	-8,500,000	.. 13	2 .. 8	5½ .. 5½	-36,000,000
.. 22	1½ .. 2½	4 .. 5	-10,000,000	.. 20	4 .. 9	5 .. 5½	-40,000,000
.. 29	1½ .. 4½	5 .. 6	-16,500,000	.. 27	2 .. 9	5½ .. 6	-39,000,000
June 5	1½ .. 4	4½ .. 5	-16,500,000	Dec 4	5½ .. 7	5 .. 5½	-39,000,000
.. 12	2 .. 2½	5 .. 5½	-15,000,000	.. 11	3½ .. 6	5 .. 5½	-30,500,000
.. 19	2 .. 3	4½ .. 5	-10,000,000	.. 18	3 .. 4	4½ .. 5	-26,000,000
.. 26	1½ .. 3	4½ .. 5		.. 25	3 .. 4	4½ .. 5	-22,000,000
				.. 31	3 .. 9	4½ .. 5	

HOW MONEY IS MADE

1904

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 8	2 to 6	4½ to 5	-\$10,000,000	July 8	1 to 1½	2½ to 3½	\$80,000,000
.. 15	1½ to 3	4½ .. 4½	7,000,000	.. 15	1½ to 1½	3½ .. 3½	91,500,000
.. 22	1½ .. 2½	3½ .. 4	21,000,000	.. 22	1 .. 1½	3 .. 3	101,500,000
.. 29	1½ .. 2	4 .. 4½	29,000,000	.. 29	1 .. 1	3 .. 3	107,500,000
Feb 5	1½ .. 2	4 .. 4½	28,500,000	Aug 5	1 .. 1	3 .. 3	109,000,000
.. 12	1½ .. 2	4 .. 4½	26,500,000	.. 12	1 .. 1	3 .. 3	110,500,000
.. 19	1½ .. 2	4 .. 4½	33,500,000	.. 19	1 .. 1	3 .. 3	110,000,000
.. 26	1½ .. 2	3½ .. 4½	37,500,000	.. 26	1½ .. 1½	3 .. 3	108,000,000
Mch 4	1½ .. 2	3½ .. 4½	40,500,000	Sept 2	1 .. 1	3½ to 3½	100,000,000
.. 11	1½ .. 2	3½ .. 4½	40,000,000	.. 9	1½ .. 2	3½ to 3½	91,000,000
.. 18	1½ .. 2	3½ .. 4½	38,000,000	.. 16	2 .. 2	3 .. 4	83,000,000
.. 25	1½ .. 1½	3½ .. 4	40,500,000	.. 23	2 .. 2	3 .. 4	75,500,000
Apl 1	1½ .. 1½	3½ .. 4	46,500,000	.. 30	2½ .. 2½	3 .. 4	69,500,000
.. 8	1½ .. 1½	3½ .. 4	47,000,000	Oct 7	1 .. 1	3½ .. 3½	59,500,000
.. 15	1½ .. 1½	3½ .. 4	54,000,000	.. 14	1 .. 1	3 to 3	59,000,000
.. 22	1 .. 1	3 .. 3	63,000,000	.. 21	1 .. 1	3 .. 4	61,500,000
.. 29	1 .. 1	2½ .. 3½	64,500,000	.. 28	1 .. 1	3 .. 4	62,000,000
May 6	1 .. 1	2 .. 4	60,500,000	Nov 4	2 .. 2	3 .. 4	56,000,000
.. 13	1 .. 1	3 .. 4	51,500,000	.. 11	2 .. 3	3½ .. 4	51,000,000
.. 20	1 .. 1	3 .. 4	44,000,000	.. 18	2 .. 3	3 to 4	47,000,000
.. 27	1 .. 1	3 .. 4	58,500,000	.. 25	2½ .. 4	3½ .. 4	41,500,000
June 3	1 .. 1	2½ .. 4	62,000,000	Dec 2	2 .. 2	3 .. 4	37,000,000
.. 10	1 .. 1	2 .. 4	65,000,000	.. 9	2 .. 2	4 .. 4	36,000,000
.. 17	1 .. 1	2 .. 3½	72,500,000	.. 16	2 .. 3	3 .. 4	36,000,000
.. 24	1 .. 1	2 .. 3½	76,500,000	.. 23	2½ .. 3	3 .. 3	36,500,000
July 1	1 .. 1	2 .. 3½	78,000,000	.. 30	2 .. 2	3 .. 3	37,000,000

INTEREST RATES AND SURPLUS DEPOSITS 229

1905

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 6	2 to 3½	3 to 3½	\$39,500,000	July 7	2 to 3½	3 to 3½	\$42,000,000
.. 13	1 to 2½	3 to 3½	55,000,000	.. 14	2 to 3	3 to 4½	51,500,000
.. 20	1 to 3	3 to 3½	65,000,000	.. 21	1 to 2½	3 to 4	51,000,000
.. 27	1 to 2	3 to 3½	74,000,000	.. 28	1 to 2	3 to 3½	55,000,000
Feb 3	1 to 2	3 to 3½	69,000,000	Aug 4	1 to 2½	3 to 3½	51,000,000
.. 10	1 to 2½	3 to 3½	60,500,000	.. 11	1 to 2	3 to 4	48,500,000
.. 17	1 to 2	3 to 3½	56,500,000	.. 18	1 to 2½	3 to 4	42,000,000
.. 24	2 to 3	3 to 3½	58,500,000	.. 25	1 to 3	3 to 4	36,500,000
Mch 3	2 to 3	3 to 3½	55,500,000	Sept 1	1 to 3	4 to 4½	29,500,000
.. 10	1 to 2½	3 to 3½	54,500,000	.. 8	2 to 3½	4 to 4½	19,000,000
.. 17	2 to 4	3 to 3½	46,500,000	.. 15	2 to 4	4 to 4½	10,500,000
.. 24	2 to 3½	3 to 3½	41,000,000	.. 22	2 to 4½	4 to 4½	6,500,000
.. 31	2 to 4½	3 to 3½	39,000,000	.. 29	4 to 7	4½	8,500,000
Apl 7	2 to 4½	3 to 4	37,500,000	Oct 6	2 to 8	4 to 4½	- 500,000
.. 14	2 to 4	3 to 4	40,000,000	.. 13	3 to 6½	4 to 5	- 4,000,000
.. 21	2 to 7	3 to 3½	44,500,000	.. 20	3 to 6	4 to 4½	- 2,500,000
.. 28	2 to 4	3 to 3½	48,500,000	.. 27	3 to 4½	4 to 4½	200,000
May 5	2 to 3½	3 to 4	51,500,000	Nov 3	4 to 6½	4 to 4½	- 5,500,000
.. 12	2 to 3	3 to 3½	50,500,000	.. 10	4 to 15	5 to 5½	- 16,000,000
.. 19	2 to 2½	3 to 3½	44,500,000	.. 17	4 to 25	5 to 6	- 18,000,000
.. 26	2 to 4	3 to 3½	44,000,000	Dec 1	4 to 27	5 to 6	- 13,000,000
June 2	1 to 4	3 to 3½	35,000,000	.. 8	3 to 12	4 to 5	- 16,500,000
.. 9	2 to 3	3 to 3½	34,000,000	.. 15	3 to 15	5 to 6	- 24,000,000
.. 16	2 to 2½	3 to 4	35,500,000	.. 22	6 to 15	5 to 6	- 20,500,000
.. 23	2 to 2½	3 to 4	44,000,000	.. 29	6 to 125	5 to 6	- 21,000,000
.. 30	1 to 6	3 to 4	45,000,000				- 23,500,000

HOW MONEY IS MADE

1906

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 5	4 to 60	5½ to 6	-\$21,000,000	July 6	5½ to 8	4½ to 5½	-\$14,000,000
.. 12	3 .. 8	5½ .. 5½	-8,000,000	.. 13	2 .. 3½	4½ .. 4½	-12,000,000
.. 19	3 .. 6½	4½ .. 5	4,000,000	.. 20	1½ .. 3	4½ .. 4½	-1,000,000
.. 26	3½ .. 4½	4½ .. 4½	6,000,000	.. 27	2 .. 2½	4½ .. 4½	1,700,000
Feb 2	2½ .. 5	4½ .. 4½	4,000,000	Aug 3	2 .. 3½	4½ .. 4½	-9,500,000
.. 9	2½ .. 4½	4½ .. 4½	-1,000,000	.. 10	2 .. 5	5 .. 5	-9,500,000
.. 16	2 .. 5½	5½ .. 5½	-3,700,000	.. 17	2 .. 4½	5 .. 6	-13,500,000
.. 23	2 .. 8	5 .. 5½	-7,000,000	.. 24	3 .. 6	6 .. 7	-17,000,000
Mch 2	3 .. 7	5 .. 5	-11,000,000	.. 31	3 .. 13	6 .. *8	-21,000,000
.. 9	3 .. 6	5½ .. 5½	-17,600,000	Sept 7	2 .. 40	6 .. *8	-37,600,000
.. 16	3 .. 9	5½ .. 5½	-16,500,000	.. 14	3 .. 12	6 .. *7½	-31,000,000
.. 23	3 .. 5½	5 .. 5½	-16,000,000	.. 21	2 .. 10	6½ .. *8	-20,800,000
.. 30	3½ .. 8	5½ to 5½	-21,000,000	.. 28	3 .. 7	6 .. *8	-17,000,000
Apr 6	5 .. 30	5 .. 5½	-29,000,000	Oct 5	3 .. 9	6½ .. 7	-21,000,000
.. 13	2 .. 25	6 .. 6½	-27,400,000	.. 12	3 .. 4½	6 .. 6	-15,000,000
.. 20	2½ .. 6½	5 .. 5	-10,000,000	.. 19	3 .. 7	5½ .. 6	-20,000,000
.. 27	3 .. 5½	5½ .. 6	-10,500,000	.. 26	2 .. 9	6 .. 6½	-27,800,000
May 4	3 .. 12	5½ .. 6	-15,000,000	Nov 2	3 .. 7	6 .. 6	-37,000,000
.. 11	2½ .. 5	5 .. 5½	-11,000,000	.. 9	6 .. 15	6 .. 6½	-46,700,000
.. 18	2½ .. 4	4½ .. 5	-14,000,000	.. 16	2½ .. 20	6½ .. 7	-45,600,000
.. 25	2 .. 5	4½ .. 5½	-16,600,000	.. 23	4 .. 12	6 .. 7	-50,000,000
June 1	1½ .. 5	4½ .. 5½	-15,000,000	.. 30	3½ .. 27	6 .. 7	-62,500,000
.. 8	2 .. 4	4½ .. 5	-12,000,000	Dec 7	2 .. 36	6 .. 7½	-60,800,000
.. 15	2 .. 5	4½ .. 5	-12,000,000	.. 14	4 .. 28	6½ .. 7½	-55,500,000
.. 22	2 .. 4	4½ .. 5½	-8,000,000	.. 21	2 .. 29	6 .. *8	-51,600,000
.. 29	2 .. 6	5 .. 5½	-7,000,000	.. 28	3 .. 18	6 .. 7	

\* Highest rate on all industrial collaterals

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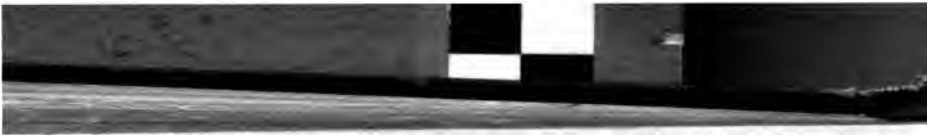
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Pine Street, corner Pearl Street **NEW YORK**