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HOW MONEY IS MADE IN SECURITY INVESTMENTS

BY

HENRY HALL

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TO

V. H. H.

WHOSE CALMNESS OF JUDGMENT, WISE COUNSELS
AND ELEVATION OF CHARACTER HAVE
BEEN A CONSTANT INSPIRATION
TO THE AUTHOR

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PREFACE

PREVIOUS editions of "How Money is Made in Security Investments," of which there have been five, have been generously received and warmly commended by the American public. The book appears to have served a useful purpose. Five years having elapsed since the last edition, it is proper now to republish the book, carefully revised and rearranged, with its historical discussions and statistical data freshened and brought down to date, and with new illustrations. The book has been considerably expanded by the addition of new material.

The aim of the author has been, primarily, to supply beginners in investment with a practical text book, which will describe how money, saved by thrift, can be so shrewdly employed in securities as, in the course of a series of years, to amount to a competence and perhaps to a fortune. It has also the farther object of making numerous suggestions, based on long experience and an intimate knowledge of the history of Finance, to a great number of men, competent and successful specialists in their own vocations and almost wholly absorbed therein, who often overlook some vital circumstances in the investment of their surplus funds in securities. The book aims to supply a broad and rational foundation, upon which farther investment study can be built.

Many investors abhor Speculation, in the sense in which the term is popularly understood. Nevertheless, experience has proved the soundness of, and thousands of fortunes have been founded upon, the well established, tried and tested broad principle that "a good investment is a good speculation, and that, if it is not a good speculation, it is not even a safe investment." This is the principle underlying the suggestions of this work. Unless there is strong assurance, when a man invests, that stocks or bonds are going higher in market value, it is a practical certainty either that part of the money will be wholly lost in the investment or else so locked up as not to be available for other uses for many months, and, in some cases, for years. The years 1905 to 1915 supplied a great volume of proof of this statement.

It is as important to avoid the errors of investment as to beware of the pitfalls of speculation. An investor frequently buys securities in periods of bullish enthusiasm at precisely the time when he should be selling everything he has. Conversely, he often sells his stocks or bonds in a fright exactly when every lesson from history, every financial consideration, should prompt him to buy. It is hoped that the suggestions of this book will enable the owners of surplus capital to correct some errors of investment and aid them to employ capital wisely and profitably.

The successful investor, every man in fact who wishes to add a desirable increment to his fortune from time to time, and to conduct his private business operations successfully, takes advantage of and bases his actions upon Economic Cycles. The basic ideas upon this point are: First, that security prices and general business fluctuate through major and minor Cycles, mainly under the influence of economic conditions. Second, that the best results are attained by making commitments with reference to said Cycles. Considerable space is therefore devoted in the following pages to the overwhelmingly important topic of Cycles. Attention will be given especially to the striking changes in the prices of securities, due to alternating periods of prosperity and depression in this country, and to the smaller and quite noteworthy fluctuations at certain seasons of the year, all of which are utilized by successful investors.

Coming danger and coming prosperity (and therefore the trend of business and the security markets) are always foreshadowed, clearly and unmistakably, to the student of Finance. To one not conversant with the American character and the disposition of Americans to trust to luck and personal energy to extricate themselves from trouble, when it arises, it would seem remarkable that the business world should have been taken by surprise by, not to mention minor instances, the Panic of 1907 and the great Stock Market boom of 1915. Students of Finance foresaw both. The terrible Panic of 1907 and the wonderful boom of 1915 were both predicted by the author of this book, long in advance, the Panic of 1907 in correspondence with the President and members of the U. S. Senate, and both the Panic of 1907 and the boom of 1915 in private correspondence with his clients. When capital has been laboriously earned and placed at risk, either in practical business or in securities, it is certainly expedient that the possessors thereof should pay attention to those underlying forces in operation in the United States, which affect the safety and integrity of investments. They should place themselves in a position to forecast what is coming and to regulate their conduct in accordance with forecast in time to prevent losses. This work will indicate the vital matters, which should be watched, both in order to avoid loss of capital and to insure a consistent increment to one's means through a series of years.

HOW MONEY IS MADE

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I

HOW AN INVESTOR MAKES MONEY

MOST FORTUNES IN AMERICA ENHANCED BY SECURITY INVESTMENTS.—HOW THE THING IS DONE.—A FORTUNE AT MIDDLE AGE IS WITHIN THE REACH OF EVERY YOUNG MAN

TO 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 country estates 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, Andrew Carnegie, Henry C. Frick, Charles M. Schwab, and thousands of other well-known Americans is a sufficient refutation of Machiavelli's heartless and immoral doctrine.

But how do rich men make their money? What formula do they use? Is the way yet open to men of moderate means? Can a young man, who starts in life with a clear head, an honest heart, a strong physique, and a willing spirit, but without a cent to his name, ever expect under present circumstances to gain such opulence as other men enjoy? The answer is, certainly; and the late J. P. Morgan, John D. Rockefeller and Andrew Carnegie are authority for the statement and they ought to know.

The origin of great fortunes in China, India and Russia is readily understood. Autocrats having the power of life, death and taxation over a multitude of subjects, have only to use that power with energy to accumulate the incredible wealth of a Li Hung Chang, a great Maharajah or a Grand Duke. In South America, rulers often retire with great riches as a result of practically the same methods. But in more stable and more civilized countries, where no one is subject to a tyrant and the people are free agents, especially in the United States, why is it that so many men can leave to their heirs sums of money, so vast that they could not possibly have been derived from the profits of any ordinary vocation in life, no matter how great the business establishment?

The first glimpse as to the explanation of this mystery was afforded to the author of this book in 1894–1896, when it fell to his lot (while Business Manager of *The New York Tribune*) to compile a list of the "millionaires" of the United States, a task which consumed a year and a half.

The object of the compilation was, if the facts should warrant, to silence the Populists of Kansas, who were claiming at that time that "there were 30,000 'millionaires' in this republic, owning one-fourth of the wealth of the country, their fortunes having been made in occupations protected by the Tariff." The inquiry was not only as to the size of American fortunes, but their origin. An immense number of bankers and other authorities in the different States saw no reason, then, why they should not communicate, very frankly, although in confidence, the information they possessed as to the source of the fortunes of the rich men in their vicinity. The investigation was extremely thorough. It disclosed the existence of only about 4,300 millionaires in the United States in 1896, the majority of whom had *not* made their fortunes in protected industries. Publication of the facts silenced the Populistic contention effectually.

Incidentally, another rather surprising fact was established, to wit, that no matter whether the millionaires of 1896 were merchants, manufacturers, real estate owners, agents, lawyers or bankers, the great majority of them had added very materially to their capital by profitable operations in securities, not by saving merely, but by employment of savings to make large profits. The revelations of the millionaire list of 1896 in this respect have since been fully confirmed by later investigations.

In the United States, there comes into existence, annually, a fund of money, available for investment in Stocks and Bonds, extremely large in the aggregate. This fund is in addition to, and distinct from, the annual increase in wealth, in lands, live stock, machinery, and other forms of fixed capital. It is composed of the savings and surplus profits of the people and of corporations. For the sake of an important bond house in New York, the author once engaged in a minute investigation as to the total amount of this annual new investment fund. Complete information was impossible to obtain, there being no official statistics on the subject. From many considerations, however, it was perfectly evident that the sum is now not less than a full billion dollars a year. Of this immense aggregate, one man will possess not more than one thousand dollars, which, however, is to him quite as important as the million or more, which is the annual surplus of a few men of great wealth. How to manage the whole of this new investment fund, so that no part of it shall be lost, so that all of it shall be saved and added to the permanent estates of its possessors, and all of it made to bring an increment to fortune, is a subject worthy of careful inquiry.

It is probably impracticable to expect that the whole of this annual new investment fund can ever be saved by everybody and be added to the permanent estates of all its possessors. Not only will much of it be locked up indefinitely in investments, which afterward decline in price, subjecting the capital to the possibility of future loss, but much of it will actually be lost, both in securities and in business enterprise, and will never return to its original owners. On the other hand, there is no question that men thoroughly versed in the Science of Investment and legitimate Speculation, have it within their power to save all they make, to lose no part of their new investment money, and to add steadily to capital.

Stocks and Bonds in the United States change most astonishingly, from time to time, in market value. In no other country in the world, in fact, do such wild fluctuations occur, in the price of the whole mass of securities. They are so great, that what we would ordinarily regard as simply a trading fluctuation would be looked upon in Germany and France, for instance, as almost a Panic. As an example of the instability of prices in the United States, it may be stated that the stocks, listed at the New York Stock Exchange, declined in market value in the Panic of 1907 at least $4,726,573,000 from the high prices of 1906, leaving out of account a few obscure stocks which hardly ever appear in the transactions of the Exchange. The mass of bonds listed at the New York Exchange experienced a parallel decline. There was also a vast decline in the securities listed at the other exchanges of the United States. The Panic of 1907 cost the owners of stocks, to say nothing of bonds, a loss greater than the Civil War cost the United States. In 1909, the same 221 stocks in New York referred to above, had risen in market value at least $4,235,093,000. Bonds also recovered considerably. Those persons who were in a position to take advantage of these changes in prices made fortunes.

Every young man who has saved a thousand dollars can take his place upon the firing line of finance and among the capitalists of the future, if he will depend upon some regular occupation for his means of support, and will spend a reasonable amount of his leisure time in the study of finance, the tariff and banking, and will follow sound and sane methods in his security investments and cultivate his own judgment and powers of intuition. Such a man ought readily to be worth a million at middle age. It may also be stated that the majority of men make their big money after they are fifty years of age. Does this seem chimerical or unreal? Let us see, as we go on.

Before passing on, however, let the writer disavow any intention to encourage petty speculation in stocks. His purpose is a different one. So far as that is concerned, however, nothing that any man can say will ever put an end to speculation, which is the principle of barter carried to the point of taking risks. Bold spirits have always speculated in something, from the days of primitive man—

in lands, cattle, mines, mulberry trees, tulips, potatoes, pig and scrap iron, gold, copper, 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 methodical 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.

That the market prices of all securities were subject to serious variations was observed long ago. 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 have always been 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.

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 finance 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.

D. O. Mills, pioneer of California and banker, made the bulk of his fortune through the purchase of such stocks as Union Pacific, when selling below $10 a share, and holding them until the shares had attained marvelously high prices.

E. H. Harriman, one of the most constructive geniuses Wall Street has ever known, began life in moderate circumstances. He accumulated a fortune far in excess of a hundred millions by shrewd and far sighted investments in railroad shares during panics and periods of business depression, and by carrying them through the stress of hard times until the corporations which they represented had been brought, partly through his own exertions, to a height of great prosperity.

It is well known that the Rothschilds founded the now huge fortune of their house by the purchase of British government bonds, after the battle of Waterloo and before the defeat of Napoleon had become publicly known.

The wealth of J. P. Morgan, a man who began life with a large estate, inherited from his father, and whose subsequent gains were in part due to commissions collected from reorganization schemes and bond sales, added materially to his enormous fortune by buying stocks when they were cheap and selling them when they were high.

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 alone 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? In previous editions of this book, a number of examples were given of what could have been accomplished by investors, who bought their stocks outright, paying for them in full, starting in 1870. In order to modernize the data on this point, a fresh set of calculations will now be supplied, starting with 1893, the year of the great Panic.

Suppose that a young man, starting in 1893 with a thousand dollars which he had earned and saved, had put it 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 $930. New York Central has always been an investment stock, slow moving in price, and very safe. If the investor, starting with his ten shares, had sold the stock within three or four 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 1893 to 1915, he would have then been worth the sum of at least $60,000; 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 1893, he had put his money into Norfolk & Western, he would have had to pay about $960 for 160 shares of it. If he had sold, and bought again, as above outlined, dealing in Norfolk & Western alone, his holdings would have grown to about 3,660 shares by 1915, worth about $440,000, all the outgrowth of the original $960.

Ten shares of Delaware, Lackawanna & Western, bought in 1870, for $1,300, would have grown to 220 shares in 1915, worth about $51,000.

There were fewer stocks to choose from in 1893, than now—only about ninety actively traded in at the New York Stock Exchange, then, compared with over 350 now. It is therefore quite possible, that a neophyte in investment in 1893 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.

An investor could have bought 100 shares of Atchison, Topeka & Santa Fe in 1893 for $1,000. By following the seasonal and other strong movements in the stock (and meanwhile being out of it during the period when an assessment was paid during the reorganization) he would have increased his 100 shares to something over 7,000 shares by 1915, worth around $770,000.

Suppose that he had gone into St. Paul, a stock with a checkered career, one of the active footballs of speculation, but now a sedate investment. He could have bought ten shares in 1893 for $480, paying about $48 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 129¼. 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 199⅝ in 1906. If an investor in ten shares of St. Paul (bought in 1893 for $480) 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 $185,000 by 1915.

If our investor had chosen Union Pacific for his studies and investment, from 1893 to the present day, he could have started with fifty shares costing about $850 and sold out his interests in 1915 for something like $800,000, and this, too, without having had to pay the assessment when the company was reorganized in 1897.

One of the favorites of active speculation in New York is Reading, par value $50, and thus called a half stock. Until 1915, it was customary at the New York Stock Exchange to quote Reading, as though it were a full share, par value $100. Whoever bought 100 full shares of Reading actually bought 200 of the half shares. For the sake of the present statement, Reading will be considered as a half share, quoted at so many dollars a share. In 1893, 100 shares of Reading could have been easily bought for $600. The fluctuations of the stock have been wider than in the case of the old time investment issues. Had Reading, bought in 1893, at 100 shares for $600, been traded in consistently until 1915 on the principle outlined above, the original investment of $600 would in 1915 have amounted to more than $1,500,000.

Men, with larger capital, would have operated on a more extensive scale, and have made proportionately.

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

Those who operate in stocks on a large scale do so, commonly, on a margin. Operations on a margin are, by conservative investors, considered speculation, pure and simple. A few words will hereinafter be devoted to the subject of margins. Meanwhile, reference may be made to the fact, that if our investor had bought his stocks, in the foregoing instances, upon a margin of half the face value of the shares, he would have made twice as much money in the 22 years in question and would never once have been in danger.

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 (when he must sell), or when prices are actually scraping on the bottom of a long decline (when he must buy). An outsider can never sell at the highest or buy at the lowest, except by accident; 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 is 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. To-morrow, 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 anybody to sell his stocks and retire from the market? The newspapers cannot do this. They can and do call attention to the fact, occasionally, 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.

II

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. 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 in existence 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, ship owners, 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 capital 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 organized stock exchanges of their own. There are stock exchanges now in Boston, Philadelphia, Pittsburgh, Chicago, Colorado Springs, San Francisco, Detroit, and other cities. In Boston and New York, there are also so-called curb markets for dealing in securities not admitted to the big exchanges.

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. 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 at 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 1909 to the value of over $1,300,-000,000. More than 350 descriptions of stocks are now dealt in, and more than 650 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 $190,000,000,000. In 1916, the country is rich and comfort is general, at least among the native born. Americans earn more, live better and save more than their forefathers did. Thousands are now capable of owning a few shares of stock or a few bonds, compared with a mere handful in the year of adoption of the

Constitution, and there are more than 5,000 millionaires. So far as the people at large are concerned, one needs only to refer to the savings banks to gain a clue to the general diffusion of wealth—8,635 depositors in 1820, with total deposits of only $1,139,000, and more than 8,000,000 depositors now, while the average of accounts is thrice as large.

In every rank of life, one now finds investors in securities, and the number of them grows, year by year, as the natural product of the thrift of a busy people, laws which give equal opportunities to all, an inspiring climate, bountiful harvests from our rich soils, the energy shown in every branch of trade and manufacture, the discoveries of coal, oil and metals, the division of estates, and the opportunities for profitable speculation.

Here, as in older countries, in which there is entire freedom of thought and action, and which have risen from primitive conditions to wealth and prosperity, thousands of workmen have passed the stage where they often lacked bread to eat, and have saved a few thousand dollars and bought a few bonds or shares of stock. Many a village blacksmith and smart carpenter and grimy toiler in an iron mill is thus a capitalist on a small scale. More than 50,000 employés of the United States Steel Corporation alone are owners of stock in that concern. In New England, operatives are taking shares in the cotton mills.

Farmers, who, as a class, formerly struggled under the most trying conditions for a bare maintenance, are now recruiting the ranks of buyers of securities. A notable circumstance is the fact that in the West hundreds of small banks have been organized in the last twenty 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. So large is this throng of small investors, that many brokerage houses of good standing and repute make a distinct specialty of what is called the "odd lot" business in stocks.

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.

Securities issued by railroad corporations in the United States amount to more than 20¼ billion dollars, par value, while industrial corporations have issued several billions more. The bulk of these securities is owned by the people of the United States. No farther statement is necessary to indicate the enormous importance of such a study of finance, as will enable the owners of securities to safeguard the capital which has been invested in them.

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

BEFORE 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, provided that the times and the laws of the country justify an extension of the business. 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. In special instances, the rate of profit is larger. In 1915 and 1916, the manufacturers of motor cars are making from 30 to 50 per cent or more upon their capital, while iron and steel companies, which have been overwhelmed with war orders from Europe for munitions and supplies, are reported to be amassing profits equal in amount, one company making 100 per cent. Standard Oil has divided between 31 and 48 per cent annually during the last ten years. Calumet & Hecla Mining, a copper company, pays anywhere from $10 to $100 a year on its share capital, par value $25, on which only $12 has ever been paid in. But these are exceptional cases. If the capital stock of those concerns were as heavily watered as that of most industrial corporations, the percentage of profit would be much smaller.

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 analogous 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 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 bonds corresponds rather closely to the average rate of interest on commercial loans of money (four months or more) in New York City, the financial center of the country. From stocks, an investor expects an approximation to the legal rate of interest, and perhaps something more, in consequence of the greater risk in buying stocks.

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 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, 10 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, later a 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 continued 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.

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 Massachusetts, Rhode Island, California, Colorado, Pennsylvania and New York, "any rate" is legal when agreed upon by private contract 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 1905 and 1907, 127 per cent in October, 1896, and 186 per cent in 1890 and 1899.

But while the rates allowed by law on commercial paper and on loans, secured by Stock Exchange collateral, 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 3½ to 4½ 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 3½ 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 duration. In ordinary times, and for a period of years, the ruling rate of interest on long time loans seldom goes far from 3½ to 5 per cent for the bulk of the business, with an average of about 4 to perhaps 4½. 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.

The range of interest rates on commercial loans for four months or more in New York, since 1890, has been:

1890	4½ @ 9	Average,	5¾
1891	4½ @ 6½	"	5½
1892	2½ @ 6	"	4⅜
1893	2½ @ 15	"	5½
1894	2 @ 4	"	3
1895	2 @ 6	"	3½
1896	3 @ 12	"	5¼
1897	2½ @ 5	"	3¼
1898	3 @ 6	"	3¾
1899	2 @ 6	"	4½
1900	3 @ 6	"	4½
1901	3 @ 5½	"	4⅜
1902	4 @ 6½	"	5
1903	4 @ 6	"	5⅛
1904	2 @ 5	"	3½
1905	2½ @ 6½	"	4
1906	4½ @ 8	"	5¾
1907	4 @ 8	"	5¾
1908	2½ @ 7	"	3⅞
1909	2½ @ 5	"	3⅝
1910	3½ @ 5¼	"	4¼
1911	3⅛ @ 4⅞	"	4⅛
1912	3½ @ 6	"	4⅞
1913	4⅜ @ 6½	"	5¾
1914	3½ @ 6¼	"	4½
1915	2⅞ @ 4¾	"	3½

An investor will therefore look for a return of 4 per cent or a trifle more from money which he puts into railroad bonds, and 6 to 8 per cent from the money which he invests in stocks. If those securities sell at prices which would make the yield appreciably larger, as they 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 8 to 9 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.

The current rate of interest on commercial paper affects the amount of return to be expected from security investments. In 1896–1897, it was strongly asserted by bankers in the United States that money had gone permanently upon a 3 per cent basis and that no more than 3 per cent was to be expected from bonds. On the other hand, in 1914 it was asserted, at one time, with equal positiveness that money had gone permanently upon a 6 per cent basis and that investors would pay no price for securities which did not return at least 6 per cent. The return to be looked for varies, therefore, with the times. It also varies with the cost of living.

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 University is one, who maintain that gold inflation must stimulate enterprise and increase the demand for the use of money and thus maintain interest rates. In support of this theory, it may be stated that while the stock of gold in the United States has trebled since 1890, the total business transactions of the country have far more than trebled within the same period. Admitting that the use of checks and drafts minimizes the amount of gold required to transact a billion dollars' worth of business, it remains true that the aggregate business transactions of the United States have grown in volume more rapidly than the gold. 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

BONDS 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 $100 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, or on the securities of other corporations which it owns; 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 corporations to issue several different classes of bonds. 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.

The different classes of bonds are as follows:

GENERAL: A first lien on everything, not before mortgaged.
FIRST MORTGAGE: A first lien, preceding all other bonds.
SECOND MORTGAGE: A second lien on the property, and, in reorganizations, seldom so well treated as first mortgage issues.
ADJUSTMENT: Issued generally for improvements, ranking usually as a second mortgage.
PRIOR LIEN: In rank, ahead of subsequent issues; sometimes, an actual first mortgage because of retirement of previous issues.
CONSOLIDATED: Bonds which supersede two or more previous issues.
COLLATERAL TRUST: Secured by a pledge of securities.
REFUNDING: Issued in exchange for previous bonds, usually at a lower rate of interest.
CONVERTIBLE: Any kind of a bond, exchangeable for stock or bonds.
SINKING FUND: Bonds, a certain number of which must be retired, annually, either by being called for payment or bought in the open market.
PURCHASE MONEY: Issued for the purchase of new properties and commonly a first mortgage thereon.
COUPON: Principal payable to bearer. Interest coupons are detachable and also payable to bearer.
REGISTERED: Principal and interest payable by check to the person in whose name the bond is registered.
LAND GRANT: Based on lands, retirable from land sales.
EQUIPMENT: Issued for purchase of cars, locomotives, etc., and a direct mortgage on the equipment. In popular demand.
PARTICIPATING: Debt certificates, receiving interest at varying rates, as permitted by income.
INCOME: Last of all in rank. Incomes must receive interest, if earned, before dividends are paid on the stock.
DEBENTURE: Not a bond. In reality, a promissory note, although the document itself has the form of a bond.

Convertible bonds are a popular feature of corporate 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, which are specified in the bond. Eloquent testimony to at least the speculative value of convertible bonds, at times, is supplied by many instances on record. The Chicago, Milwaukee & St. Paul, River Division 1st 4s, sold as low as $700 a bond in 1870 but rose to $1,925 a bond in 1901. Two other St. Paul issues, which sold lower than par in the '70s, rose to 190 and 196 respectively in 1901–1902. Union Pacific, 1st lien convertible 4s were quoted as low as 90⅝ in 1903 and in 1906 were up to 160⅜. Inspiration Copper 1st 6s advanced from 94½ in 1913 to 190 in 1915, while the same company's debenture 6s advanced from 97 in 1914 to 187 in 1915. Kennecott Copper convertibles sold as low as 108 and as high as 220, in 1915.

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. 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, a banking house, or a disinterested specialist in the analysis of intrinsic values, 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 in 1914 (latest report) was $80,270 a mile, of which $34,416 per mile represents the stock and $45,854 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, and in "The Financial Review," published annually by *The Financial Chronicle* of New York city.

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, 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 and bankers that, after cost of maintenance has been deducted from 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 more than 80 per cent is required, an investor should take advice as to the propriety of selling his bonds and stock and going into some other security. When fixed charges amount to 100 per cent of the net profits, dividends on the stock are out of the question. When, as in the case of Chicago & Alton, fixed charges have amounted to between 125 and 250 per cent on the net profits, a heavy deficit is certain to accrue annually and the road is headed straight for financial bankruptcy and a receivership. There are a number of high-class and prosperous railroads in the United States, which require only 30 to 40 per cent of net profits to pay all fixed charges.

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 3½ to 5 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 a few hundred millions 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 to 4½ per cent.

That a railroad bond may be dangerous is evident from the fact, that in every year there are about $425,000,000 of this class of obligations, which pay no interest at all.

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, when high-class, well seasoned and thoroughly sound investment issues sell at such a premium that the income yield is no more than 3 to 3½ per cent, they should be sold by investors, 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 sound 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 4 to 5 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 resident 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 on 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.

Low interest bearing bonds are, in 1916, no longer favored by the investment world, unless their market value is so low as to make the income yield average 4 to 4½ per cent. There are now outstanding in the United States about $1,000,000,000 of 3½ per cent railroad bonds. The sounder ones sell around 90 normally; others from 60 to 70. A sound 4 per cent bond sells for $800 to $950 per bond, normally. A 5 per cent will cost the investor from $900 to $1,050, normally. Prices go above or below these figures in extreme bull or bear markets, and in accordance with monetary conditions. 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 1907, they never sold below $1,130 and they have since gone to $1,300. 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, the St. Louis & San Francisco general lien 5s sold in 1915 as low as 63½ (once 98⅛). The earnings of the company did not even fully meet the interest on the funded debt.

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 should 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 financial 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 above par.

In the terrible financial reaction of 1907, many bonds fell from twenty to forty points or more (between $200 and more than $400) and supplied excellent chances for profitable investment. Among them were:

	High, 1906	Low, 1907	Decline
American Tobacco, 6s, 1944............	117	85	32
Atchison, conv. g. 5s, 1955............	104½	80	24½
Brooklyn Rapid Transit, 5s, 1945.......	109	85	24
Central of Georgia, 1st pref. inc. 5s, 1945	99	58	41
Chesapeake & Ohio, 4½s, 1992.........	109	87	22
Consolidated Gas, conv. deb. 6s, 1909...	168¾	94	74¾
Colorado Industrial, 1st coll. tr. 5s, 1934	83½	35	48½
Delaware & Hudson, con. 4s, 1916......	112⅞	88	24⅞
Erie, 50 year, conv. 4s, 1953...........	109	46½	62½
Lackawanna Steel, 1st 5s, 1923.........	108¾	80	28¾
St. Louis Southwestern, consol. 4s, 1932.	82	54¼	27¾
Seaboard Air Line, 4s.................	92	59	33
Southern Pacific, coll. tr. 4s, 1949.......	95½	70	25½

In 1905, nearly all bonds returned to the high values of 1902 and several of them went higher. After 1902, with only one rally of consequence in the intervening period, the broad trend of the bond market was steadily downward until the summer of 1915. The bond business had been overdone, while the persistent hostility of public officials at Washington and in the States had militated strongly against the market values of all railroad securities. In 1915, bonds ranged lower than in the frightful panic of 1907. The following table exhibits the facts clearly:

	Average high in 1902	Average low in 1907	High in 1909	Low in 1915	Rally in 1915
Seven 3½s	103½	82⅜	92½	78⅛	84¾
Twenty 4s	101½	84¾	96⅞	79	86¾
Four 4½s	111⅜	95¾	107½	93⅝	98⅛
Twenty-five 5s ..	117¼	96½	111	91⅝	96⅞
Seven 6s	130½	110⅜	120⅛	105⅝	107¾

It will be long before bonds return to the high prices of 1896 to 1905.

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.

As an illustration of the changes in price of bonds during any given year or series of years, a few of them are shown on other pages herein, with their highest and lowest quotations in each year since 1892. They are representative bonds. A few are given, which have now gone out of existence. Such of them as have been retired or refunded show how a bond acts when it approaches maturity. They all show the long, slow deterioration in price of even the soundest investment issues since 1902.

Bonds should never be bought for investment more carelessly than stocks. Two striking instances will bring the fact to proof.

A financial sensation of the years 1897 to 1899, in this country, was the flotation of something over $200,000,000 of 3½ per cent bonds by the Vanderbilt railroads, some of them at a high premium. The bonds were manipulated in the market, so as to attract investment. One issue of them sold as high as 113¼, in 1899. The financial world went mad at that time over the proposition, soberly advanced by bankers, that money had gone permanently on a 3 per cent basis in the United States (just as now it has an idea, that money has gone permanently on a 5 to 6 per cent basis). The 3½s

Year	Atchison adj. g. 4s, 1995. Low	Atchison adj. g. 4s, 1995. High	Bklyn. Rap. Transit gold 5s, 1945. Low	Bklyn. Rap. Transit gold 5s, 1945. High	Buff., Roch. & Pbgh. consol. 1st 6s. Low	Buff., Roch. & Pbgh. consol. 1st 6s. High	Can. Southern 1st guar. 5s. Low	Can. Southern 1st guar. 5s. High	Central N. J. gen. mge. 5s, 1987. Low	Central N. J. gen. mge. 5s, 1987. High
1892					114¾	121	105⅛	110	109½	114
1893					112	120	99	109½	102	114½
1894					116	120	105½	114	110½	117½
1895					115½	122	109	112⅝	111	120
1896	28¼	51⅛	70	80	112	120½	105	110⅞	110	120
1897	41¾	61	70	96¼	116¾	123	108	113½	106	118
1898	54¾	79½	91	106¾	123	125	107¾	111⅛	109½	116
1899	75⅛	88½	108	116	126¼	130½	107	111¼	113¼	122½
1900	78½	90	100	108	124	128	105	109⅛	117½	129¼
1901	86¾	99	103½	110½	127⅝	130	105½	109	127	137⅛
1902	89	97	102	110¼	125¾	129½	104⅝	107½	132	141
1903	86	92¾	99¼	107½	122⅛	125⅝	102	105⅝	126¼	134
1904	87¼	98	99¼	109¼	121⅛	124	102½	106	128	136½
1905	93¼	99¼	108¼	112¾	124¾	130	102	104¾	132¾	136¾
1906	91	97¾	104¼	109	125⅞	128½	100½	103	125¾	132
1907	77½	92⅞	85	107	118	123½	98⅞	104¾	113	126¼
1908	83	95⅛	91	102½	117	121⅝	104⅝	104⅝	117	130¼
1909	92	95½	102½	108	118¾	121½			124¼	129¼
1910	88	95	101¾	105	116¼	116¾			120	125½
1911	90¾	92¼	102½	104¾	113¾	114¾			120½	123½
1912	87⅝	92⅜	102½	106¼	112	115⅝			118	122¾
1913	83	88¼	99⅛	103¼	107¼	110⅞			112¾	119⅝
1914	81	88⅛	99½	104	109	110			112	118
1915	80¼	88½	100⅛	103⅜	106⅛	107½			111¼	118

Year	Ches. & Ohio 1st con. g. 5s, 1939. Low	Ches. & Ohio 1st con. g. 5s, 1939. High	Ch. & East Ills. 1st con. gold 6s, 1934. Low	Ch. & East Ills. 1st con. gold 6s, 1934. High	Ch. & East Ills. gen. mge. 5s, 1937. Low	Ch. & East Ills. gen. mge. 5s, 1937. High	Ch., Bur. & Quincy deb. 5s, 1913. Low	Ch., Bur. & Quincy deb. 5s, 1913. High	Ch., Mil. & St. Paul consol. 7s, 1905. Low	Ch., Mil. & St. Paul consol. 7s, 1905. High	Ch., Mil. & St. Paul gen. mge. A, 4s, 1989. Low	Ch., Mil. & St. Paul gen. mge. A, 4s, 1989. High
1892	101	107	119	123¼	97	104	100	105½	125¼	132¼	86¼	92½
1893	90	106	113	123⅛	93½	103	83	102¾	119	129	86	95
1894	101¼	110	118½	125	94	101⅞	96	102½	126	131	89¾	92⅛
1895	103⅛	112½	121½	127¼	96	104	98⅛	105	125	129¾	87	96½
1896	100	111¾	118	127	94	102½	85	101½	119	132½	91½	98
1897	107¾	114½	124	133	98⅞	103	93	107	128	142	96	106
1898	111	118	122	134	101¼	109½	104⅞	111	138	163¼	102	109
1899	113	121	131	139½	109½	117½	108	113	160	174½	108⅛	114⅞
1900	115½	121¾	133½	138	112	117	108½	112	166	185¾	109	114⅝
1901	119	122	135	140	115	127	108	112¾	180	194	110	114½
1902	116¾	123½	136	139⅞	120	126½	106½	110	182½	196	110¼	117
1903	114	119¾	127	136½	113	121⅝	104⅝	108	165	178	103	112
1904	114¾	120½	129	129	114½	120	103	108¼	169	184	107¼	112
1905	117¼	122	133½	138½	117¾	122	102	108⅛	178	187	110½	113⅞
1906	116	119½	120⅞	139	116½	120	102½	107			105½	111
1907	101	116	115	128⅛	102	117½	94	104			98	107
1908	107½	116½	122	122	106½	116⅛	97¼	103½			100	104¼
1909	112	117	126	137	112⅛	115¾	99⅝	103¼			101	104⅝
1910	110½	114¾	121	127	108⅝	113	100½	102½			98	100½
1911	111	113½	123¾	127	109	111½	100⅞	101½			98	99⅝
1912	109	111¾	119½	125	106½	111⅛	99⅞	101⅝			96½	99⅛
1913	103	110	107	119	96	108	99¾	100⅛			89¼	99
1914	101¾	107⅞	102	112½	75	100½					89½	96¾
1915	102	106	91	104¼	59	84					85	93⅜

Year	Chic. & No. Western deb. 5s, 1933.		Chic. & No. Western general 3½s, 1987.		Chic., R. I. & Pac. 6s, 1917.		Rock Island refunding 4s, 1934.		C. C. C. & Ind. gen. consol 6s.		Del. & Hud., Pa. div. 7s, 1917.		Del., Lack. & W'n 7s, 1907.		Erie, 2d Exten. gold 5s, 1919.		Ill. Central 1st gold 3½s, 1951.		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
1892	105	109			121	126¾			118½	123¾	138½	142	130	135	114¾	117	90½	95	113	117
1893	103⅛	112			114	126½			115	123½	135	138½	125	130	106	115½	92½	98	108	116½
1894	106	112½			123	131			117	123	140½	144½	130½	134	112	116½	93½	100¾	113	118
1895	104⅝	112½			126	132½			119	126½	143	143	130	132	114	116	97	104	117¼	123½
1896	104¾	111¾			119½	131½			124	127	136	143½	125	130	112½	116	99¾	104	117¼	120
1897	110⅝	117¾			128½	134⅛			123¼	128	142	147½	125½	128	116	122	101	101	113	119
1898	114	120¼	99	103½	129⅞	134¼			127¾	132¾	145	146	122	128	116½	119½	102	105	117	124
1899	115	123	102½	110½	130	136⅛			131	137½	145	148	126½	126½	115½	121	103½	107¼	120	124½
1900	118	125	105¼	110⅞	129	133¼			128½	137	146⅛	148	122⅛	124½	119⅛	119⅛	104½	106½	120	122¼
1901	121½	125¾	109½	111	127¼	132¼			133	138½	145½	147½	117¾	123½	119	121	104	107½	121	123
1902	117½	124	102¼	106⅝	128	132			138	138	140¼	144	114¾	120⅛	118⅝	122	104	105⅝	117½	122
1903	114½	118½	95½	101	121¼	127½			127½	133⅝	136	137⅛	111⅞	117	111	113¼	99½	102	118	118
1904	115¼	118	96½	100¼	121⅝	130	96¾	97¼	128	130	133¾	137¼	109⅛	112⅝	112⅝	113¾	101¼	102	116	118
1905	116	119⅝	99	101¼	120¾	126	95	99⅛	131¾	135	134	134½	106½	110¼			101½	103	115½	117½
1906	113	117	95	100½	117⅜	120⅝	91½	97	134	135	133	133	104⅞	107⅞	109½	114½	99½	100½	113¾	117
1907	105	114	87	98	114	116¾	80	91¾	127	132			101⅞	104½	99	109	91¼	100⅞	105¾	114⅛
1908	108½	113⅜	90	96	112	116⅛	83½	92	120	130	121½	123			101½	104⅛	91¾	93⅝	105	112½
1909	109	113½	89¼	94¾	111⅝	114½	89¾	94	125	125	118½	122			105½	106⅝	88½	94½	110	112⅝
1910	109	111½	87	90	109½	112	86	92	119	125½	120	120⅞			104¼	106⅞	89½	92	110	112⅝
1911	107	110	85	88⅛	108⅝	110	87½	90	121¾	125¼	115½	116			104¼	108	86¼	91	109½	112½
1912	108¼	108½	83⅝	87	106¾	108⅞	86½	90¾	123	123½					104¼	104½	90	92½	108¾	110⅝
1913	100¾	107½	80	85⅛	103½	106½	70	89	120	120	107½	112⅝			101	103	84⅛	88⅞	107	108
1914	102½	104	77⅞	84	101¾	105	64½	81	105¾	119⅝					102	102½	78¼	85	106	106½
1915	101	104½	78	83⅜	101⅝	102⅝	61	71	105	105¼	104⅝	105⅝			100	101½	78¾	84	101¾	104½

Year	Louis. & Nash. gen. mge. 6s, 1930.		Louis. & Nash. coll. trust 5-20 4s, 1923.		Minn. & St. Louis 1st gold 5s, 1934.		N. Y. Central gold 3½s, 1997.		N. Y., Chic. & St. L. 1st 4s, 1937.		Norf. & Western 1st con. 4s, 1996.		Pennsylvania Co. 1st con. 4½s.		Pennsylvania R. R. conv. g. 3½s, 1915.		Reading general 4s, 1997.		Rich. & Danville con. g. 6s.	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1892	115¼	120							95	100			103¼	108⅞			83⅛	90⅝	105½	112
1893	107	119⅝							89½	99¼			102	110½			59¾	85¼	102	111½
1894	109½	119½							97½	102⅝			106	113¼			67½	80	106½	121½
1895	114	120			97½	104			101⅛	107			109½	116¼			67¼	91½	118	122½
1896	110	117⅞			96	103¼			99½	105			105½	113¾			67	87½	110¾	121¼
1897	115⅝	119			100	107¼			103½	108	67½	80⅛	109¾	115¾			79⅛	82	117¾	124¾
1898	116½	121			100½	110	105⅛	110	100	107½	74¾	90	108	116			77¾	89	118	127
1899	115½	121	96	101	110½	116½	109⅝	113¼	104⅛	109	87½	96	113½	118			82¾	90⅛	120	126⅜
1900	116	122	96¼	100	111½	119	108	111½	104⅛	108½	90½	100	111½	117⅛			83	96⅛	119	126
1901	112	121	99	102	116½	121¾	108	110¾	106	109⅛	99½	104	112	115¼			92½	100¾	121	124½
1902	115½	122	98	101½	120	124½	104	109½	104	108	99	104½	109½	113⅛	103⅛	112⅝	95½	101	119	122½
1903	114½	118	100	101⅜	109	120⅝	95	104	100	105	94⅝	101⅞	107¾	111	93⅞	107⅛	93¾	98½	114	118
1904	115¼	122	96¼	99½	113	118	96¾	101¾	102¾	106	96½	102¾	108	112	94½	103¾	94⅝	103½	114	118
1905	119	122¼	97½	100⅝	113¾	117¾	98¾	100⅞	104	106⅛	100	104⅜	108¼	111¼	101¼	107	100⅞	104⅛	114¼	118
1906	114¼	120¼	95⅜	100½	109	114½	91⅞	99¼	102	106	98⅜	102⅞	104½	108⅜	96	105¾	98¾	102⅝	112⅝	116
1907	112	117	86⅞	98	98	110½	85	94⅝	93	103¼	86	99¾	100	107	83½	95	87¼	98¾	109¼	113
1908	112⅝	120	88	98	100	110½	87½	96	95⅜	103½	90	99½	102¾	106½	88	96½	93	102½	103	109½
1909	115½	117½	97	100¼	107	111½	90¼	94¼	99½	102¼	98	100½	104	107	94¾	99½	98½	101	107⅛	111
1910	112¼	116¾			102⅝	109	87¾	92	97½	100½	96½	100	103	106	94⅞	97½	97	100	105½	106¼
1911	112	116½			103	109	87	90	99	100⅛	97½	99½	103¼	104½	95⅞	97¼	97	98½	104	105⅞
1912	112½	117½			99	105	85	88½	97½	100⅝	96	99⅞	102¼	104	96⅜	97⅞	96	98¾	102	104¾
1913	110½	114⅝			88	100	80	87¼	93½	99½	88	99	100	104	95⅞	97½	90⅜	97⅞	100¼	102½
1914	111½	115			89	94½	78¼	84	92¾	97	92	96	99⅞	102⅜	97⅞	99⅛	92	95½	100⅝	101¼
1915	110	115			81	92¼	76	84	88	94½	86¾	94½	99⅞	102½	99⅜	100⅞	91	95¾		

	Rome, Wat. & Og. 1st con. 5s.		St. Louis & San. Fran. gen. 6s, 1931.		Sou. Pacific, coll. trust 4s, 1949.		Southern Rwy., 1st con. 5s, 1994.		Texas & Pacific, 2d gold inc. 5s, 2000.		Union Pac., 1st lien con. 4s, 1911.		U. S. Steel, s. f. 5s, 1963.		Wabash, 1st gold 5s, 1939.		Wheeling & L. E. 1st 5s, 1926.		Western Union, fund. 4½s, 1950.	
Year	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
1892	111½	115¼	106¾	111					25	34½					102	107	104	109½		
1893	104	115	94	111½					13	29¼					93	106½	101½	107½		
1894	113½	119⅛	82	106½			86½	91¼	17½	28¼					101¼	107½	100	108		
1895	113½	116½	102	112			84½	99½	17	31⅞					100	109½	97½	106		
1896	115	119¼	101½	114			76	94½	13¾	24⅝					99	109	96	102½		
1897	117¾	122⅛	108⅛	119⅝			87½	95¼	18	33½					101⅜	108¼	85	93		
1898	119½	130½	114	125			87	106	28	50½					104½	114⅛	100½	103		
1899	122½	132	122	126¾	73	87¼	103¼	112½	45⅞	56½					112	118	104	110½		
1900	125⅜	129¼	121¾	130	78	85⅝	106	114½	53	90					113	118½	107	116	104¼	107
1901	125¼	129	125	136½	83	95½	111¾	124½	90	100	103	129			117	120½	112	117½	105½	109½
1902	118½	127½	130	134	89	96	118	124	96	102¾	103	113⅞			115	121	113	115½	103⅝	109¾
1903	117	122¼	120	129	84	92⅛	111½	118⅛	81	100	90⅝	107¼	65	87⅝	112½	118	112	116½	100¾	105
1904	115½	119½	122¾	130¼	87½	96½	111	121	80	98	94½	116½	68¾	95⅞	114½	119	109¼	114	101½	106½
1905	116	119⅝	129½	132	92¼	97¼	117½	121½	93¾	102	112⅞	150½	92	99¾	114¾	119½	113	116½	104½	107⅝
1906	111¾	118	125	128½	88	95½	115	119⅛	85	102			95¾	101⅛	112¼	116½			100¾	103
1907	102¾	114	103	123½	70	90	90	113¾					78½	99	99⅝	114			84	100¾
1908	108⅞	112	113	115	83¾	94	82½	110½	65	65			85½	103⅜	102	114	100	107½	81	97
1909	108½	111	121½	124½	90	95½	107	113⅛	65	85			102⅛	108¼	111½	114½	105	109	94	96⅝
1910	104	104	120	124	89	95	103⅛	111¾	70	70			101½	105½	107	113¾	104¾	105¼	93	97¼
1911	107	110	118	119⅛	91	93⅞	104½	109½					100	106¼	103½	110	103¾	105	92	98¼
1912	106	107¾	118¼	119⅝	88	96	105½	108¼	49⅞	51			100	104⅛	104¼	107¾	101¼	105½	94½	100½
1913	102	106¼	105	114¼	87⅞	98	101	107⅛					96⅝	102	101	106½	100⅛	103	87	96½
1914	102½	105	108	112	82½	94	97⅞	106					99½	103¼	96½	105	100	102	93	98½
1915	101¾	103¾	106	110	79¾	87⅝	96½	103⅝	29	35			99⅞	105	92	99⅛	96	101	88⅛	95

were eagerly taken for "investment." These Vanderbilt $3\frac{1}{2}$s now average 82. $200,000,000 of them, par value, could not be sold for more than $164,000,000, and probably not for that, because selling would depress the price. They cost their original owners considerably more than $210,000,000. When issued, they fulfilled completely the old time idea of a gilt edged "investment," but those who took them simply engaged in a wild and inconsiderate speculation. Any sane man should have known that in this great and growing republic, a region which had by no means attained its full development, money could not long remain upon a 3 or $3\frac{1}{2}$ per cent basis. As a matter of fact, interest rates shortly afterward rose appreciably; and the $3\frac{1}{2}$ per cent bonds have since then seriously depreciated in market value.

In a large town in New England, a man, who enjoyed an income of over $100,000 a year from his business, had saved $2,000,000, which he proposed to "invest" where it would be absolutely safe. He purchased $2,000,000 worth of British consols, then considered the premier security of the world. It is understood that he was able to "invest" around par. To-day, those consols could not be sold for more than about a million and a half. British banks with large investments in consols, have in recent years been charging off from $100,000 to $500,000 a year, due to shrinkage in the value of that security. The income has of course been regularly paid.

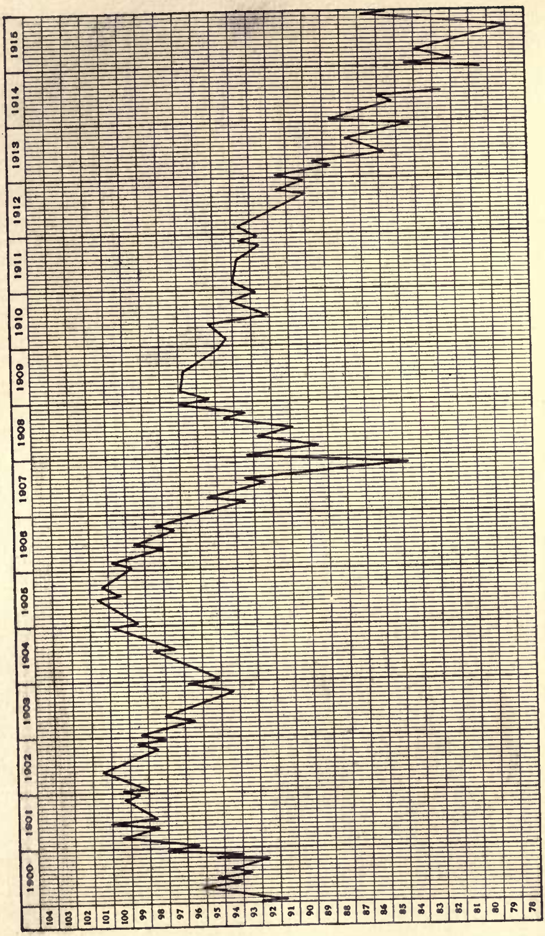
As a matter of general interest, the high and low prices of British consols in each year for 100 years past are shown in the table on page 42.

A CENTURY OF CONSOLS

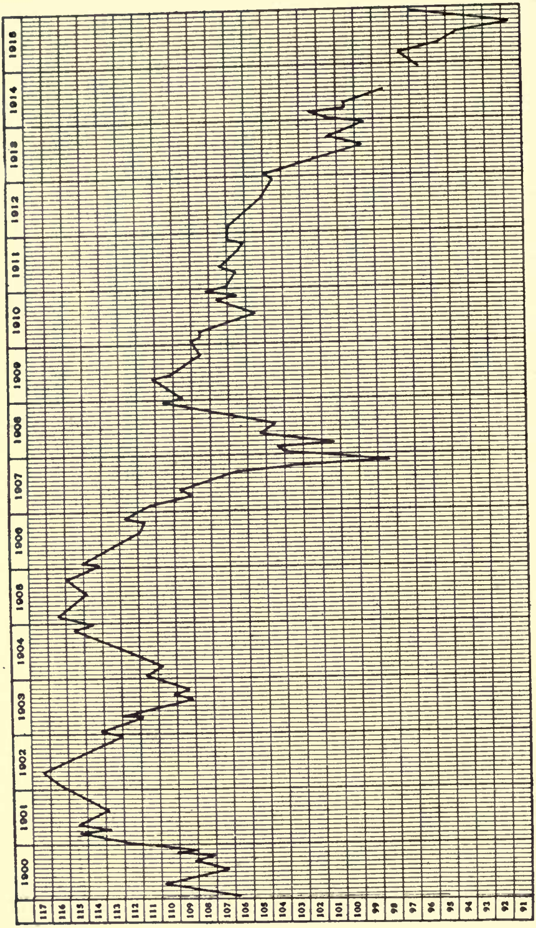
Comparison of High and Low Prices for the Past Hundred Years

Year	High	Low	Year	High	Low	Year	High	Low
1814	$72\frac{1}{2}$	$61\frac{1}{2}$	1851	$99\frac{1}{8}$	$95\frac{5}{8}$	1888	$103\frac{3}{8}$	$98\frac{1}{8}$
1815	$65\frac{3}{4}$	$53\frac{7}{8}$	1852	102	$95\frac{7}{8}$	1889	$99\frac{1}{4}$	$96\frac{1}{2}$
1816	$64\frac{5}{8}$	$59\frac{1}{2}$	1853	101	$90\frac{3}{4}$	1890	$98\frac{3}{4}$	$93\frac{3}{8}$
1817	$84\frac{1}{2}$	62	1854	$95\frac{7}{8}$	$85\frac{1}{4}$	1891	$97\frac{1}{2}$	$94\frac{3}{8}$
1818	83	73	1855	$93\frac{3}{4}$	$86\frac{1}{4}$	1892	$96\frac{7}{8}$	$93\frac{1}{4}$
1819	79	$64\frac{7}{8}$	1856	$95\frac{7}{8}$	$85\frac{3}{4}$	1893	$98\frac{1}{4}$	$95\frac{7}{8}$
1820	$70\frac{1}{4}$	$65\frac{3}{8}$	1857	$94\frac{1}{4}$	$86\frac{1}{2}$	1894	$102\frac{1}{8}$	$97\frac{1}{8}$
1821	$78\frac{3}{4}$	$68\frac{3}{4}$	1858	$98\frac{7}{8}$	$94\frac{1}{8}$	1895	$108\frac{1}{8}$	$103\frac{1}{2}$
1822	83	$75\frac{3}{8}$	1859	$97\frac{3}{8}$	$88\frac{1}{4}$	1896	*$113\frac{7}{8}$	$105\frac{1}{8}$
1823	$85\frac{3}{4}$	72	1860	$95\frac{7}{8}$	$92\frac{1}{4}$	1897	$113\frac{7}{8}$	$110\frac{5}{8}$
1824	$96\frac{7}{8}$	$84\frac{3}{4}$	1861	$94\frac{1}{4}$	$89\frac{1}{8}$	1898	$113\frac{3}{8}$	$106\frac{3}{4}$
1825	$94\frac{1}{4}$	75	1862	$94\frac{3}{4}$	$91\frac{1}{2}$	1899	$111\frac{1}{2}$	$97\frac{3}{4}$
1826	$84\frac{1}{2}$	$73\frac{7}{8}$	1863	94	90	1900	$103\frac{1}{4}$	$96\frac{3}{4}$
1827	$89\frac{1}{2}$	$76\frac{3}{4}$	1864	92	$87\frac{1}{8}$	1901	$97\frac{7}{8}$	91
1828	$88\frac{3}{8}$	$80\frac{1}{8}$	1865	$90\frac{1}{2}$	$86\frac{3}{4}$	1902	$97\frac{7}{8}$	$92\frac{1}{8}$
1829	$94\frac{1}{4}$	$85\frac{5}{8}$	1866	$90\frac{1}{2}$	$84\frac{5}{8}$	1903	$93\frac{5}{8}$	$89\frac{7}{8}$
1830	$94\frac{1}{4}$	$77\frac{1}{2}$	1867	$96\frac{3}{8}$	$89\frac{7}{8}$	1904	$91\frac{1}{4}$	85
1831	$84\frac{3}{4}$	$74\frac{7}{8}$	1868	$96\frac{1}{8}$	$91\frac{3}{4}$	1905	$91\frac{13}{16}$	$87\frac{1}{2}$
1832	$85\frac{3}{4}$	$81\frac{5}{8}$	1869	$94\frac{1}{4}$	$91\frac{3}{4}$	1906	91	$85\frac{9}{16}$
1833	$91\frac{1}{4}$	$84\frac{1}{4}$	1870	$94\frac{5}{8}$	$81\frac{1}{2}$	1907	$87\frac{3}{8}$	$83\frac{9}{16}$
1834	93	$87\frac{1}{2}$	1871	94	$91\frac{3}{8}$	1908	$88\frac{3}{8}$	$83\frac{5}{16}$
1835	$92\frac{7}{8}$	$89\frac{1}{4}$	1872	$93\frac{3}{4}$	$91\frac{1}{2}$	1909	86	$82\frac{1}{16}$
1836	$92\frac{1}{4}$	$86\frac{5}{8}$	1873	94	$91\frac{3}{4}$	1910	$83\frac{1}{2}$	$78\frac{3}{8}$
1837	$93\frac{7}{8}$	$87\frac{7}{8}$	1874	$93\frac{5}{8}$	$91\frac{1}{4}$	1911	$82\frac{1}{8}$	$76\frac{3}{8}$
1838	$95\frac{1}{4}$	$90\frac{5}{8}$	1875	$95\frac{3}{4}$	$91\frac{7}{8}$	1912	$79\frac{1}{4}$	$72\frac{5}{8}$
1839	$93\frac{7}{8}$	$89\frac{1}{4}$	1876	$97\frac{1}{2}$	$93\frac{3}{8}$	1913	$75\frac{5}{8}$	$71\frac{1}{16}$
1840	$93\frac{1}{8}$	$85\frac{3}{4}$	1877	$97\frac{3}{8}$	93	1914	$77\frac{1}{16}$	$69\frac{1}{4}$
1841	$90\frac{1}{2}$	$87\frac{1}{4}$	1878	98	$93\frac{5}{8}$	1915	$68\frac{5}{8}$	57
1842	$95\frac{1}{8}$	88	1879	$99\frac{5}{8}$	$94\frac{7}{8}$			
1843	$97\frac{3}{8}$	$92\frac{1}{8}$	1880	$100\frac{3}{4}$	$97\frac{3}{8}$			
1844	$101\frac{3}{8}$	$96\frac{1}{2}$	1881	103	$98\frac{1}{4}$			
1845	$100\frac{5}{8}$	$91\frac{7}{8}$	1882	$102\frac{1}{2}$	99			
1846	$97\frac{3}{4}$	$93\frac{1}{4}$	1883	$102\frac{3}{4}$	$99\frac{3}{8}$			
1847	94	$78\frac{3}{4}$	1884	$102\frac{3}{4}$	$98\frac{7}{8}$			
1848	90	80	1885	$101\frac{1}{2}$	$94\frac{3}{8}$			
1849	$98\frac{7}{8}$	$88\frac{5}{8}$	1886	$102\frac{3}{8}$	$99\frac{3}{8}$			
1850	$98\frac{3}{8}$	$94\frac{3}{8}$	1887	$103\frac{3}{4}$	$99\frac{7}{8}$			

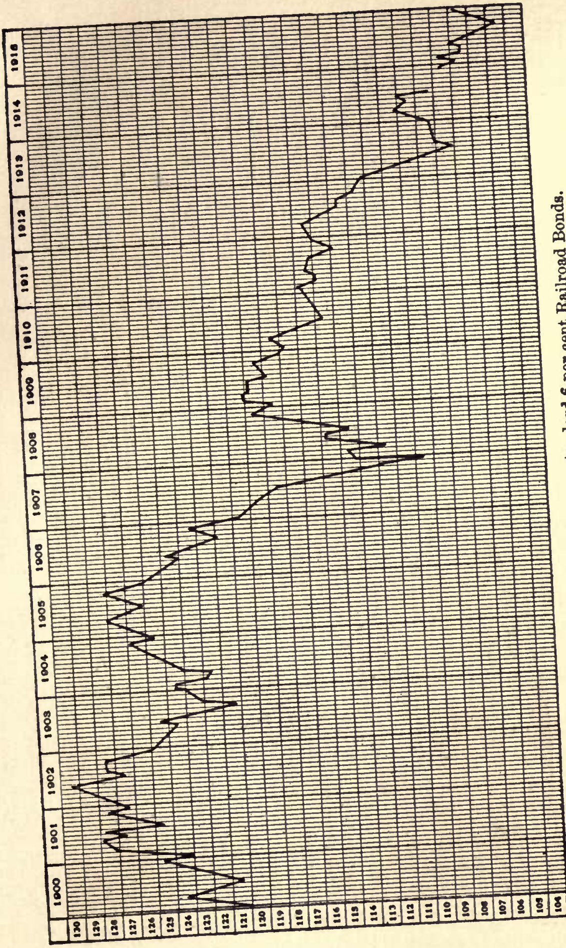
*Maximum price, $113\frac{7}{8}$ in 1896. Minimum, $47\frac{1}{4}$ in 1798 (French War).



Course of average price of twenty standard 4 per cent Railroad Bonds.



Course of average price of twenty-five 5 per cent standard Railroad Bonds.



Course of average price of seven standard 6 per cent Railroad Bonds.

V

STOCKS

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

THE 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.

A modern idea is to issue stocks with no par value stated in the certificates. Among these are Great Northern Ore, Submarine Boat, Kennecott Copper, Adams Express, American Express, and Massachusetts Lighting.

Mining shares are usually issued in small nominal par value; but such stocks were seldom listed or traded in on the New York Exchange, until within the last few years. Several $5, $10, $20, $25 and $50 mining shares are now listed at the Exchange in New York. In Boston, a great number of low-priced mining shares are listed.

The $50 or half shares, as they are called, were generally quoted in New York until October 13, 1915, on the basis of $100 a share. When one bought Reading, for example, at $140, he really acquired two shares at $70 each. All stocks are now quoted in New York at dollars per share.

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. Those upon which no dividends are paid and the chances of any dividend are remote, are valuable mainly for their 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, scrip, 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 41 per cent of arrears of dividends and finance the arrears of dividends on the cumulative 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. 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 preferred stock of the old Rock Island Company had a right to elect a majority of the directors. The preferred of Interborough-Metropolitan of New York had no voting power, as long as dividends were paid.

The price at which stocks can be bought is quite another matter from their par value. A good 5 per cent railroad stock is now 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, 5 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 5 per cent stock pays only 3.82 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 5 per cent railroad stocks can sometimes be bought for $35 to $50 a share, as witness the prices of 1907. At those quotations, such stocks would yield from 10 to 14 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, 7 and 8 per cent railroad stocks sell, in these times, around $100, $110, $115 to $125, and $135 to $150 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. Formerly, when investors expected a smaller income return from investments than in 1916, the 5, 6, 7 and 8 per cent railroad shares sold normally at $125, $150, $175 and $200 respectively.

It is assumed that an investor will confine his attention entirely to standard stocks, traded in at the established exchanges. In the multitude of shares 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 1914 show that, whereas the steam lines of the United States had issued a total of about $8,680,759,000 of capital stock, yet on more than $3,013,686,000 of the aggregate there was not 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 is 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, unless he knows positively that earnings are so large as to ensure dividends at an early date. The two stocks above referred to did not attain their later 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 Stock Exchange supervision as to ensure quarterly reports at least, the public would be benefited greatly; and it is difficult to understand why the corporations themselves would be injured, although it must be said that some of the companies consider that they would. Partly through the labors of the author of this book, the New York Stock Exchange now employs its influence to induce corporations to make at least quarterly reports of earnings. The railroads already make monthly reports and publish them promptly.

Union Pacific once paid 10 per cent and earned more than 18 per cent for the common shares, while possessing assets of enormous value. The knowledge of this imparted a high value to the stock. Reading pays 8 per cent and usually earns more than 10. Norfolk & Western, a rising property, now pays 6 per cent on its stock and often earns more than 10. 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, in good times. The public knowledge of these things, derived from the minute and excellent reports of these corporations, has never proved an injury to the stocks.

It does not follow, however, because the foregoing or any other standard stocks are sound, 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, substitution of electricity for steam for motive power, 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, 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. The extraordinary and unprecedented boom in many obscure industrial common shares in the wonderful bull market of 1915 was due wholly to the fact, that from 20 to 50 per cent a year was being earned on those shares, as a result of huge war orders from the allies in Europe.

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. The regularity of their dividends and the surplus profits which they have earned justify 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 $150,000,000. United States Steel, preferred, may have to weather other storms but has entered the investment class of stocks, owing to its extensive control over 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, that, unless there is reasonable expectation that 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

ECONOMIC CYCLES

DURATION OF A MINOR CYCLE, 10 TO 11 YEARS; OF A MAJOR CYCLE, APPROXIMATELY 20 YEARS.—THE FOUR STAGES OF A CYCLE.—A DISCUSSION OF THEIR CAUSES.—SAFETY OF INVESTED CAPITAL AND THE ACQUISITION OF FORTUNE, DEPENDENT UPON ADAPTATION TO CYCLES

IN human affairs, from the earliest times within the memory of man, there have been regularly recurring periods of great and general prosperity, and of great and general depression, alternately, in trade and manufactures. The length of time extending from one period to another is called a Cycle. There always have been, and are to-day, Cycles in trade and manufactures; Cycles of sun-spots; Cycles of rainfall and thus of grain production; Cycles of famine and plenty; and Cycles of war and peace. The present discussion will deal with Cycles in trade and manufactures and their influence upon the market price of securities.

When economists first began to identify the existence of Cycles, these periods were thought to last from 50 to 75 years. Later, it was considered that they were approximately of only 20 years' duration. Confirmation of that view was apparently supplied by the fact that, in the United States, first class panics, followed by depression in trade and manufactures, have taken place at intervals of about 20 years, as, for instance, in 1791, 1814, 1837, 1857, 1873, 1893 and 1914. These periods are sometimes lengthened, sometimes shortened, by the efforts of man and the incidents of the times. A characteristic feature of these 20 year periods has always been, however, that about midway in each one, there has been a halt and set-back in business and in securities, as in 1826, 1847–48, 1866–67, 1884, and 1903. The 20 year Cycle is thus divided into two parts, generally of unequal length. And as 10 years is a long enough time to plan for, in business affairs, the most practical view to take is to consider Cycles as lasting approximately 10 to 11 years, each one of these shorter periods also having a setback about midway of its length. Here is a statement of the 10-year Cycles of the last 78 years in the United States:

1837. A first class panic, and beginning of a major Cycle of 20 years.

1847–1848. A reaction in trade and finance and end of a 10 year period. A setback had taken place in 1841.

1857. A first class panic, end of a 20 year Cycle and beginning of a new one. In the 10 year period, from 1847 to 1857, a setback had occurred in 1851.

1866–1867. End of a minor 10 year Cycle, accompanied by a panic. A setback, midway of this 10 year period, was an incident of 1861.

1873. A panic of the first magnitude. Beginning of a new 20 year Cycle. A setback had taken place in 1871.

1884. End of a 10 year Cycle. A moderate panic. A setback had taken place in 1881.

1893. A panic of great severity. Beginning of a new 20 year Cycle. In 1890, there had been a setback in securities and some reaction in trade.

1903. A panic in the security markets, with a moderate recession in trade. End of a 10 year Cycle. There had been a halt and setback in 1896.

1914. A panic and reaction in business. A furious setback had taken place in 1907, when there was a panic of terrible force. Beginning of a major 20 year Cycle.

With reference to 1914, able authorities differ upon and debate the question whether that year or 1907 marked the end of a major Cycle. The principal argument against the view that a major Cycle ended in 1907 is the fact, that, while the financial panic was terrific, the business depression which ensued was very short. On the other hand, 1914 not only marked the completion of a 20 year period, but it followed a long period of liquidation in business and securities. The liquidation in business was abruptly ended in 1915 by the demands upon American industries, emanating from the war in Europe; but the liquidation in securities continued. The author is inclined to the view that, in 1915, the country entered upon the first part of a major 20 year Cycle.

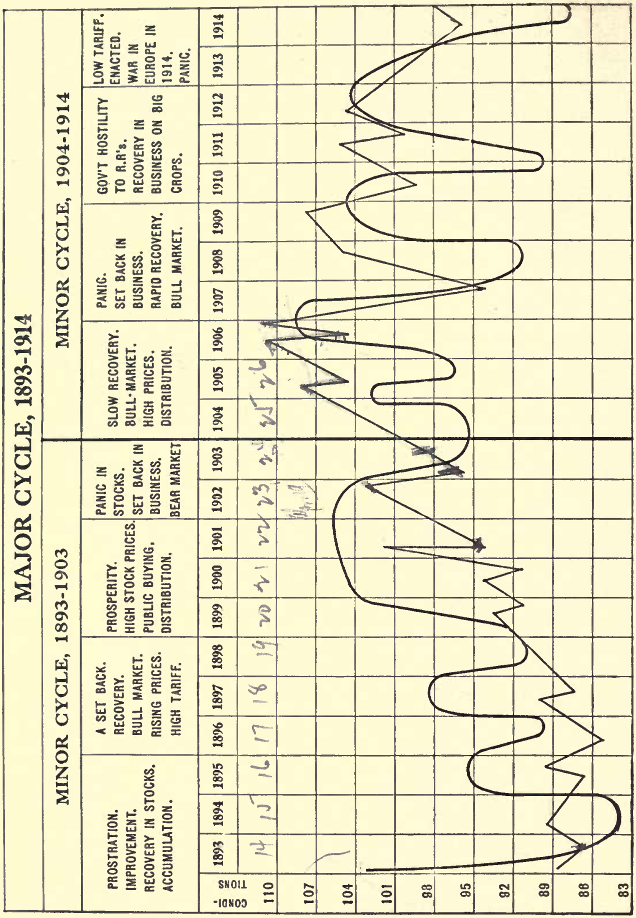
Prof. W. S. Jevons of England cites, as dates of crises in the British Isles, the years of 1701, 1711, 1721, 1731–32, 1742, 1752, 1763, 1772–73, 1783, 1804–5, 1815, 1825, 1836–37, 1847, 1857, 1866, and 1878. These dates supply another reason for discussing Cycles, as of approximately 10 or 11 years' duration.

Authorities have differed with respect to the number of stages, into which a Cycle should be divided. The writer has heretofore regarded a Cycle as properly divisible into three parts. For convenience, and because authorities are now generally agreed upon the matter, Cycles will herein be considered as divided into four stages.

It should be noted, here, that neither the 10–11 year Cycles, nor the four quarters or stages into which they are divided, are always of precisely the same length in point of time. They are shortened or lengthened by incidents of the times, the enactment of tariff laws, the size of the food crops, wars, and others of the fundamental economic factors, to which more extended reference will be made later.

FIRST STAGE, RECOVERY

The first stage of a Cycle is marked by gradual recovery from previous prostration. The pressure of liquidation and bankruptcy has been lifted. New courage is inspired in despairing business men and workmen. All persons engaged in practical pursuits perceive that a turn toward better things is in progress. Manufacturers, merchants, miners, real estate operators, and others awaken to new life; and they plan, prepare for, and begin to carry out extensions of their respective lines of enterprise. A distinct revival in the iron trade is one of the most characteristic features of the first part of a Cycle. A revival in iron and steel invariably leads to a revival in other lines; and this is true not only in the United States but in all other lands and at all times. Factories are enlarged in the first part of a Cycle and new ones constructed. New equipment is ordered from the steel mills for industrial operations and for the railroads. Idle labor is gradually drawn into employment. Salesmen are sent out in increasing numbers by merchants and bond houses. Merchants order larger stocks of goods. Millions of money have been lying idle in the banks; and that part of this hoard, which has been loaned out, has brought the very lowest rates of interest. The banks have been loaning money on call from 1 to 1½ per cent; and prime commercial paper has brought no more than 2½ to 3½ per cent, a circumstance which characterizes the bottom of every depression. The doors of the banks are now once more crowded with merchants, manufacturers, miners, railroad officials, and promoters, who desire loans in order to finance business opera-



Curved line, Conditions. Zigzag line, Course of twenty Railroad Stocks.

tions upon an enlarged scale. Iron, fabricated steel, ores, copper, textiles and other commodities begin to advance in price. Huge stacks of pig metal, which have accumulated in the yards of the blast furnaces, begin to fade away in consequence of the greater activity in manufacturing. And in a general way, the whole country enters with buoyant hopes upon a fresh era of material progress. Securities advance in market value, discounting, in advance, the larger earnings and the increased dividends which are promised; and a great bull speculation begins. The first stage of a 10–11 year Cycle lasts about 2 years.

SECOND STAGE, PROSPERITY

During the second stage of a 10–11 year Cycle, general business goes forward with a rush. The construction of houses and office and other buildings becomes active, creating a fresh demand for structural material. Large sums of money are expended by the railroads for branch and main lines, bridges, elimination of grade crossings, new equipment, and, in these modern times, for electrification of suburban lines near the big cities. Labor is well employed. Every one is making money. There is a pronounced advance in national and private wealth. A state of plenty and contentment exists among the people. Dividends, previously suspended, are resumed upon many securities, while existing dividends are in many cases raised to a higher figure. Speculation in stocks is brisk; and securities which are most favored by large earnings advance substantially in price. Commodities are higher. The cost of living rises. Labor begins to demand better compensation. This second stage of a Cycle lasts from 2 to 4 years, and generally ends with a setback in the security markets, on profit taking, and with a temporary slowing down of business enterprise and speculation in all lines.

THIRD STAGE, GREATER PROSPERITY

In the third stage of a 10–11 year Cycle, prosperity resumes its sway and rises usually to a higher pitch than before. Factories are rushed to their full capacity. A boom in real estate, trade, manufactures and mines breaks out in all parts of the country.

Many securities rise to new high levels, some to previously unheard-of prices. Speculation in stocks is at the boiling point, enthusiasm being favored by another crop of increases in dividends. A characteristic trait of this period is prodigality in the personal expenses of the people. To use the words of Benjamin Franklin, the poor see with envy on every side "luxury of dress, luxury of equipage, luxury of the table." In modern times, rich families indulge in an extravagant number of motor-cars, in the richness of dress of their women, and in expensive entertainments. New enterprises are now launched in great number. The public are asked to subscribe for enormous issues of new securities. At this stage, the forces which make for reaction become pronounced. The semaphore lights down the line change from white to green, then to red. There is a renewal of the conditions which caused the last great crisis in finance and which will precipitate the next one. An overproduction of goods and securities is noted. The demands of labor and the strikes for higher wages begin to curtail profits. Competition between producers of all classes becomes keen, with the inevitable result of lower prices for goods and farther curtailment of profits. Merchants cease to order large stocks of goods, in order not to be caught with an excessive supply on hand, which might have to be sold at a loss. Retrenchment becomes the order of the day. The banks have by this time become heavily extended as to loans; and they enter upon a policy of restricting accommodation to merchants, manufacturers, promoters and real estate operators. Interest rates rise. Pressure is brought to bear upon stockbrokers to induce them to reduce the speculative commitments of their customers. This leads to the selling of stocks and a long slow decline in the prices thereof. Trade and industry, always keenly sensitive to the course of the security markets and to rising rates of interest, gradually lose their buoyancy and become retrograde. Working forces are reduced in the factories and elsewhere. The number of the unemployed increases. Buying power of the people being thus curtailed, retail trade is more and more affected. The latter part of the third stage of a Cycle is one of slow liquidation, and, so far as stocks are concerned, of distribution by pools and large operators.

FOURTH, OR PANIC, STAGE

THE fourth and last stage of the Cycle is marked by a panic in securities, general prostration in business and hard times. Liquidation becomes acute, and there is a collapse in trade and the security markets, aided by the calling of loans by the banks. The trouble leads finally to the insolvency of many business firms, a number of speculators of all classes, and of several weak railroads, and often of financial institutions. The crisis invariably starts with money stringency and is usually precipitated by the failure of some prominent business firm or financial institution, which spreads consternation among the over-confident. The characteristic traits of this period, after the panic, are a practical end to all new enterprise; dwindling trade; a heavy fall in the prices of securities; smaller earnings by corporations, merchants, miners and manufacturers; general retrenchment of expenses; lower wages; strikes; the discharge of surplus workmen and clerks; the closing of many factories, together with the institution of part time in others; a rapid increase in business insolvencies; and prolonged hard times for all classes. Beggars throng the cities and tramps the highways. Actual starvation overtakes only too many of the unemployed. Railroad traffic falls off and idle freight cars increase strikingly in number. Money accumulates in the banks. Interest rates are low. This hard-times stage of the Cycle commonly lasts 2 or 3 years. Another 10 or 11 year Cycle then dawns upon the country.

WHY TEN AND TWENTY YEARS IN LENGTH

THE phenomenon of Cycles and the recurrence of great panics at stated intervals have attracted the attention of economists for more than three centuries. In Europe especially, legislators and statesmen, with whom efficiency in government and efficiency of the people in business are distinctly objects of prime importance, the subject of Cycles has been carefully studied. An untiring search has been made for the causes of these great fluctuations in public prosperity, in order that human ingenuity might apply itself, so far as it is able, to removing the causes of poverty, depression and distress, on the one hand, and promoting wealth and happiness on the other. In the United States, where a vast number of our present public men have little higher ambition than to be elected to office, and to retain office, and are in only too many cases heart-breakingly incompetent to legislate scientifically for the welfare of a hundred millions of inhabitants, the subject of Cycles and the causes of panics has received scant attention. And yet there is, within the reach of every public man, a wealth of information on the subject.

Economists have discussed Cycles and Crises so voluminously that a well-stocked library could be collected, consisting entirely of books and magazine articles on this general topic. Even if our public men pay no attention to this subject, it is incumbent upon every man of capital to do so, as a protection to his fortune. Those who wish to be informed minutely, will find sufficient information in any public library, and should particularly consult the works of Prof. William Stanley Jevons, John Stuart Mill, Alexander Baring, Sir William Petty, Henry C. Carey, Theodore E. Burton, H. L. Moore, G. W. Dean, M. Hyndman, Jules Clement, Dr. Hyde Clark, J. K. Rodbertus, and Charles A. Conant. Nearly 200 well known writers have published books on Cycles and Crises.

Why should Cycles be of approximately the same length? What is there in the heavens above or the earth beneath, in the forces of Nature or in the conduct of man, which should produce Cycles from 10 to 11 years in length, with setbacks every four or five years? Is there a scientific basis for this phenomenon? In the United States, are there tangible things, which can be watched and observed by the generality of practical business men and owners of securities, to serve as a guide to the beginning, the progress, and the ending of a 10 or 11 year Cycle? It is practicable to supply a partial answer to these questions.

FAMINE AND PLENTY

VARIATIONS in the food supply have a bearing on the matter. Ever since the advent of man upon the earth, alternate periods of prosperity and distress have been more or less intimately connected with the annual supply of food. A famous historic instance is recorded in the Bible, when, in the days of the Pharaohs, seven years of fatness were followed by seven years of famine. Food to eat is, and always has been, the most pressing necessity of man. In the most ancient times, periods of public happiness and activity were dependent upon a bountiful production from the soil. In later times, when commerce between nations and good roads within an empire had made it possible to supply a deficiency in the annual harvest in one locality, by importations from another, then a partial crop failure did not necessarily imply an interruption to general prosperity. A succession of bad years, however, has always been harmful in every well developed country and nothing less than a desperate public calamity in any purely agricultural empire.

An abundance of food is mainly dependent upon the forces and favors of Nature. It is true that high prices for food in any one year naturally stimulate a larger planting for next season's supply. Continual growth of the population of the United States tends also to stimulate a larger planting with each succeeding year. But oftentimes, a larger planting comes to naught, because Nature withholds the beneficial rains or other favors, which are essential to good crops. A phenomenon has been observed upon this continent, which coincides curiously with one peculiarity of Cycles. Three or four years of bountiful harvests are apt to be succeeded by several years, in which some one or all the crops are partial failures; and every few years, there are seasons of unusually small production, as, for instance, in 1873–74, 1881, 1890, 1893–94, 1897, 1901, 1903, 1907, 1911, and 1913. The worst crop failures come once in 10 or 11 years.

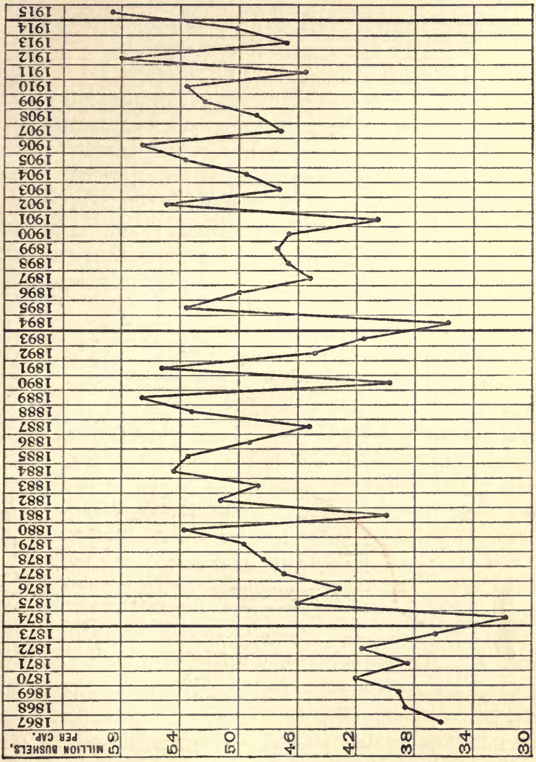
Both in Europe and America, an explanation has been sought for these circumstances. There is nothing in meteorology, astronomy or seismology, which occurs at stated intervals, about 10 or 11 years apart, except periods of maximum of sun spots. Professor Jevons and others have imagined that crop failures and crises have been due to maximum sun spots. The contention has never been established. Periods of maximum sun spots, according to the Naval Observatory at Washington, occurred in 1860, 1870, 1883, 1893, and 1905 (the next being due in 1916). Only one of these dates, 1893, coincides at all closely with unusual scarcity of the food supply in the United States.

The maximum of these disturbances on the face of the sun seems to have no connection with poor returns from the soil, except in one respect, now to be mentioned. It is not known whether the following fact has ever been mentioned by others; but it may be stated, as a curious coincidence at least, that, with one exception (1870), years of maximum sun spots have indeed been years of small crops of cotton in the United States; and so far as 1870 was concerned, the following year (1871) was attended by a small crop of cotton. A deficient cotton crop is always a national calamity, but is not sufficient, of itself alone, to bring on a crisis or a prolonged halt in business.

While there is no known explanation, therefore, of the actual cause of serious deficiency in the food crops every 10 or 11 years, the fact remains that serious deficiencies do occur and are always attended by halts, and usually by setbacks, in business and securities. It has been observed by the United States Weather Bureau that, as a general rule, whenever this country is visited by three or four years of bountiful rains and sufficient sunshine, this condition is immediately followed by several seasons, when drouth is rather more manifest than the contrary, sometimes affecting one of the leading food crops, sometimes all of them. Inspection of the records of food production reveals the broad principle, that setbacks in business and securities have usually been coincident with years unfavorable to germination and growth, and periods of prosperity, with years when conditions have been favorable. Two of these short periods constitute a 10 or 11 year Cycle. The end of a major 20 year Cycle is almost invariably attended with a serious shortage in the crops. Here seems to be a suggestion of one scientific basis of Cycles.

TARIFF AND OTHER LAWS

Is there any other explanation? One at least can be mentioned. The civilization of these modern times is more highly complex than in former centuries, or than even as recently as the days of the American Revolution. Poverty to-day, prosperity to-morrow, are no longer exclusively due to the crops. Other great material interests have arisen in the land to afford a subsistence to our popula-



Annual production per capita of five principal grain crops:
Corn, wheat, oats, rye and barley.

tion, foremost among which are manufactures, transportation, insurance and banking; and the sickness or health of any one of these important interests, but especially of manufactures, affects powerfully the general welfare and trend of the time. In the new world, as in the old, manufactures, transportation, insurance and banking are regulated by law. No man in his right mind needs to be told, that, in the United States, these great material interests become more dependent, with each passing year, upon law for their prosperity.

There is one important difference between our country and the leading nations of Europe in this respect. In England, Germany and France, for instance, two business interests dominate all others, to wit, trade and manufactures. The economic policy of those countries therefore remains unchanged practically from generation to generation. In America, our republic is neither mainly industrial nor mainly agricultural; and our economic policy has been unstable in consequence. Every four years we elect a new President and Congress; and sometimes, in so doing, we overthrow a previous policy and institute a changed one in regard to manufactures. Thus, every four years, the safety of and profits upon billions of invested capital are placed at the mercy of the vagaries of political sentiment among our people. Even the prospect of the election of a national administration unfavorable to manufacturers invariably brings about a halt and depression in trade and a reaction in securities, as in 1832, 1884, 1892 and 1912, while, after a long public controversy, election of an administration favorable to manufactures has always proved an inspiration to new enterprise and the beginning of a new era of prosperity, as in 1840, 1860, 1888, 1896 and 1908.

National elections have a singular connection with, and supply another partial scientific explanation of, the length and peculiarities of Cycles.

With reference to railroads, here is an interest which now represents an investment of something more than 20 billions of actual cash, and which affords a subsistence to about 1,700,000 employés, disbursing among them annually not less than 1⅜ billions of money for salaries and wages, and which, besides, is the principal buyer of the productions of the iron and steel works of the country. During the last 25 years, the railroads have been made the subject of rigorous regulation under national law. By the act of February 4, 1887, they were placed under the supervision of an Interstate Commerce Commission. The Elkins law of February 19, 1903, forbade rebates. The Hepburn law of June 29, 1906, gave the Commerce Commission the added power of fixing rates, and virtually directed the coal roads to dispose of their coal mines. June 18, 1910, another law extended the powers of the commission; and there have been various other enactments, all adding to the burdens of the railroads. Coincidently, the Commerce Commission construed its vocation, and used its power, for many years, to hinder the railroads from advancing freight and passenger rates to meet increased expense for wages, and actually instituted a continual series of petty reductions of those rates. All this regulation has grown out of American politics. It is fortunate for the railroad interest and the country at large that the Commerce Commission has recently begun to reverse its policy toward the railroads.

It is difficult to connect the long campaign among politicians and legislators for regulation of American railroads in any striking manner, with the course and peculiarities of the 10 or 11 year Cycles, down to the present date. The campaign has been too slow, too gradual. There has been until 1914 and 1915 no sudden reversal of a previous policy, such as has upset or has inspired the manufacturing world on several occasions.

The midway reactions of 1903 and 1911 and the boom of 1915 were perhaps due, to some extent, to Federal policies toward the railroads. It is the reversals of policy which bring a shock or an inspiration, which cause a halt and reaction in general enterprise, or which cause the sunshine to break suddenly through the clouds and start the country forward again in a new era of prosperity. The change of heart on the part of the Commerce Commission (and indeed on the part of mercantile associations and boards of trade) as manifested by the advance in freight rates in 1914 and 1915 will undoubtedly prove a potent influence for good in both the 10 or 11 year and the 20 year Cycle, which began in 1915. Should this new policy be changed, and should the laws continue to oppress the railroad interest, then each succeeding panic and period of depression must naturally be rendered more severe, more disastrous, in consequence of the misfortunes of capital invested in railroads; and this should be borne in mind.

For practical purposes, those who have capital at risk either in business or securities need to consider Cycles as being composed of four periods of two to three years each, bearing in remembrance the fact that, in the fourth stage of the Cycle, a panic is due.

When business enters upon a new Cycle and a new period of lively expansion, and when securities respond as they always do by rushing steadily upward in price, the business man need not become conservative, curtail his credits, and reef and furl his enterprise, while the owners of securities need not prepare to sell, until after two or three years of good times have passed. Then, preparations must certainly be made for the coming midway reaction.

In the early part of the third period, business operations can again be expanded and securities be bought; but a more radical liquidation of business and securities always begins, and seems to be imperative, after the next two or three years of good times. That is the broad principle. No hard and fast rule as to details can be supplied. They vary with each Cycle; but no man will ever be in serious error if he keeps in mind the broad principle here set forth, and will especially regard closely the operations of the great forces, which will form the subject of another chapter.

No sounder and safer course can be pursued with reference to Investment and Speculation, and with a view to correct a tendency toward hasty financial action and to insure success in long-range operations, either in business or securities, than to begin with a study of Cycles and Crises. The following are a few of the good books which bear on that subject:

"Causes of the Panic of 1893," by William Jett Lauck.

"Commercial Crises of the Nineteenth Century," by M. Hyndman.

"Economic Crises," by Prof. Edward D. Jones.

"Fifty Years in Wall Street," by Henry Clews.

"Financial Crises," by Theodore E. Burton.

"Forty Years of American Finance," by Alexander D. Noyes.

"How to Forecast Business and Investment Conditions," by Frank Crowell.

"Investigations in Currency and Finance," by W. Stanley Jevons.

"Lessons of the Financial Crisis," by the American Academy of Political and Social Science.

"Overproduction and Crises," by Karl Rodbertus.

"Principles of Economics," by Prof. Edwin R. A. Seligman.

"Business Cycles," by W. C. Mitchell.

"Economic Cycles, Their Law and Cause," by H. L. Moore.

"Crises Under the National Banking System," by O. M. W. Sprague, published by the National Monetary Commission.

VII

FUNDAMENTAL ECONOMIC FACTORS

MONEY.—EARNINGS.—THE CROPS AND BUSINESS.—DOMESTIC TRADE.—FOREIGN COMMERCE.—TARIFF LAWS.—COMPETITION.—GOLD PRODUCTION.—MINOR FACTORS

NEXT in order is the subject of Fundamental Economic Factors, which are to be considered with reference to their bearing upon the security markets, and their influence in promoting prosperity and depression in business.

No human being can rise from an examination of the course of the Stock Market in New York, as depicted in graphic form on other pages of this work, or a study of financial history in this country, without becoming keenly conscious of the fact that tremendous agencies must have been in operation in various years to produce the extraordinary fluctuations in prices, exhibited in the diagrams, and the coincident periodical booms and depressions in internal commerce and manufactures. A sympathetic reader would actually feel that an irresistible lifting power was in operation in the business world and in the markets of 1864, 1880, 1901, 1904, 1906, 1908–09 and 1915. He would also actually feel the existence of the alarm and vehement force, expressed in the sensational declines in other years. As a man of intelligence, he would wish to know precisely what tangible influences produced those results.

It is certain that the great historic movements in the prices of securities and the periodical booms and depressions in trade and manufacturing have not been the result of chance, but rather of definite cause and effect. They were destined in time to attract the attention of investigators, with a view to apply the principles discovered to the prudent management of business affairs and the acquisition of private fortunes. Within the past forty years, this has been notably the case. A great deal of attention is now paid to

Fundamental Economic Factors by bankers, students and writers and by the schools of commerce and finance, connected with universities. The object is to obtain valid data for forecasting the future, as far as practicable.

The great underlying forces have always been in full operation. In the early days of our republic, when fortunes were limited and millionaires were few, little attention was paid to economic factors by merchants and others. Their existence began to be realized, however, after our Civil War, when wealth had begun to accumulate in the United States. They are in these modern times fully realized and appreciated. A thorough understanding of them is now essential to the profitable management of all forms of business enterprise, to the protection of invested capital, and the making of money by investment and speculation in securities.

First, it should be borne in mind that the stock market is not necessarily governed by any one of the economic factors, taken by itself alone. It responds to the general average of these factors. What are the fundamental forces?

MONEY

1. Supreme in importance is money, the most vital of all basic factors. Business and securities must follow money. No bull campaign in stocks is possible unless backed by ample supplies of banking funds, loanable at moderate rates of interest. No boom in trade and manufacturing can endure for many months after the loaning power of the banks is exhausted. When, for any reason, the surplus reserves of the banks fall to a minimum and cash holdings are seriously reduced, the banks are obliged to call loans. Interest rates rise. Stocks must be sold to repay the loans. Securities are certain to decline; and the facts may actually foreshadow an approaching crisis in business. In any case, and at all times, the intrinsic market value of securities is measured by their actual or potential income yield, compared with long-time loans of money.

The wild rise and extraordinary prices for stocks and the great boom in business in the Northern States of this Union, in 1864, were in part due to the great inflation of the currency in those times, from a total of $207,102,477 in 1860 to $983,318,685 in 1865. The long liquidation which followed was directly traceable in large measure to the steady contraction of the currency to $688,-597,275 in 1878.

In 1902, when the banks had reached the limit of their ability to finance the speculative pools and syndicates, which had boomed stocks to a dizzy pinnacle of prices, and when the whole country was transacting a profitable business upon an enormous scale, a sudden halt was called on account of the practical exhaustion of the supply of loanable funds. The banks were compelled to call loans, initiating a downward movement in stocks and a halt in trade, which ended in the "rich man's panic" of 1903.

In 1906, when John W. Gates, E. H. Harriman, the Standard Oil party, and in fact every prominent operator and speculative contingent was active in the stock market on the bull side, and when many railroad shares had reached a height never before witnessed in history, the overtaxed position of the banks again led them to sound the clarion call of retreat. A frightful liquidation and a panic of intense severity followed.

In 1904, 1908 and 1915, a plethora of loanable funds in the banks of the country prepared the way and laid the strong foundation for powerful business revivals and new bull markets in securities.

The new Federal Reserve system for the National Banks, which went into operation in 1914, increased the loaning power of the banks enormously by mobilizing millions of gold, formerly held as reserve. The Federal Reserve law reduced the amount of reserve, required by law to be held against deposits, from 25 per cent in the principal cities to 15 per cent, and provided various safeguards against future panics. The first fruits of this admirable system were already ripening on the trees before the heavy influx of gold from foreign lands in 1915 added yet farther to the resources of the banks.

It is not difficult to keep in touch with the condition of the National Banks. Five or six times a year, these institutions are called upon by the Comptroller of the Currency in Washington for an elaborate report of their deposits, loans and assets. The replies are assembled and tabulated, and are then published in the Associated Press dispatches. It is important to watch for them. To read their reports properly, adopt the following course of procedure:

Loans: Add "Loans and Discounts"; "Overdrafts"; amounts "Due from Banks" of all kinds; "Due from reserve agents"; "Exchanges for Clearing House"; "Clearing House certificates," if any; and "Outside checks and cash items" on banks in the same town.

Deposits: Add "Deposits," including those of public officials; "Due to Banks" of all kinds and reserve agents; and "Dividends unpaid."

Net Deposits: Gross deposits, less checks on banks in the same city; less Exchange for Clearing House; less also amount due from Treasurer of the United States; and less bills of other National Banks.

Cash: Specie and legal tenders.

These are the four principal items. A large circular, containing the facts, and with various percentages worked out, is issued by the Comptroller of the Currency after all returns have been received under each call. The circular is mailed to all the banks and to such other persons as desire it.

The item of "Surplus Deposits" is of great interest in New York city, but is not so important a factor in the condition of the National Banks of the whole United States, although always interesting. The important items in the reports, made by all the banks to the Comptroller of the Currency, are set forth on page 74 for a period of years.

In this table, note the reduction of Surplus Reserves in 1906, 1909 and 1912, which put an end to the booms of those years.

Note also the actual deficit in Surplus Reserves in 1914, due to heavy payments which this country was forced to make for American stocks and bonds, liquidated in the New York market by Europe. The enormous expansion of Surplus Reserves in 1914 and since then, in consequence of the new Federal Reserve system, is a happy augury for the future of business and securities in this country. The loaning power of the banks has been extravagantly increased.

When, in former years, the percentage of cash to loans fell below 12 per cent, liquidation was inevitable. When it had risen to 13 or 14 per cent, public prosperity and a booming stock market were sure to ensue, barring public calamities, like war and famine. Now that the Federal Reserve system has been instituted, these figures

Date of Call	Loans	Net Deposits	Surplus Reserves	Per cent of Total Reserves to Net Deposits	Per cent of Loans to Net Deposits	Per cent of Cash to Loans
1906.						
Jan. 29	$5,634,435,629	$4,783,849,294	$73,432,181	21.82	117.78	11.86
April 6	5,560,607,952	4,756,479,245	38,238,593	21.03	116.91	11.15
June 18	5,627,119,050	4,819,177,251	57,668,891	21.44	116.77	11.57
Sept. 4	5,836,044,344	4,927,865,452	26,709,054	20.70	118.43	10.72
Nov. 12	5,973,611,640	4,969,961,040	37,940,008	20.79	120.20	10.62
1907.						
Jan. 26	$5,828,138,395	$5,154,128,493	$73,447,759	21.53	113.08	11.93
Mar. 22	5,984,851,499	5,140,895,722	36,668,455	20.74	116.41	10.96
May 20	6,100,040,814	5,225,122,396	58,365,225	21.22	116.74	11.33
Aug. 22	5,999,622,740	5,256,085,097	70,053,586	21.33	114.14	11.67
Dec. 3	5,882,845,438	4,906,684,057	67,690,452	21.31	119.90	11.23
1908.						
Feb. 14	$5,713,110,071	$5,037,945,759	$169,084,751	23.47	113.40	13.80
May 14	5,872,542,592	5,291,781,121	191,149,172	23.93	110.97	14.66
July 15	6,016,303,484	5,464,614,058	151,602,997	23.17	110.09	14.11
Sept. 23	6,286,652,992	5,693,509,030	141,676,653	22.97	110.42	13.83
Nov. 27	6,493,704,247	5,773,532,553	109,962,725	22.32	112.47	13.00
1909.						
Feb. 5	$6,452,467,473	$5,898,480,527	$115,260,902	22.36	109.39	13.33
April 28	6,558,584,800	6,018,166,279	116,666,188	22.38	108.98	13.39
June 23	6,633,573,944	6,074,508,504	115,815,144	22.37	109.21	13.35
Sept. 1	6,753,688,689	6,164,677,941	77,043,745	21.67	109.57	12.65
Nov. 16	6,846,356,424	6,046,454,658	70,713,136	21.31	113.23	11.76
1910.						
Jan. 31	$6,979,630,934	$6,163,203.165	$80,730,536	21.47	113.25	11.94
Mar. 29	7,083,614,363	6,320,019,497	62,821,611	21.21	112.08	11.79
June 30	7,140,305,556	6,196,156,487	66,875,354	21.21	115.24	11.49
Sept. 1	7,035,920,811	6,247,266,834	87,606,802	21.58	112.63	12.10
Nov. 10	7,190,963,575	6,205,994,733	73,092,336	21.19	115.87	11.35
1911.						
Jan. 7	$6,998,695,943	$6,267,870,077	$86,806,848	21.40	111.66	11.95
Mar. 7	7,306,540,085	6,618,482,968	94,604,494	21.16	110.40	12.43
June 7	7,328,498,991	6,689,018,801	121,870,814	22.10	109.56	12.91
Sept. 1	7,330,460,043	6,684,859,627	76,250,250	21.36	109.65	12.22
Dec. 5	7,398,021,683	6,670,804,611	63,192,394	21.05	110.90	11.66
1912.						
Feb. 20	$7,666,106,014	$7,030,641,998	$97,078,637	21.67	109.51	12.98
April 18	7,658,327,342	6,997,244,602	80,376,956	21.30	109.45	12.17
June 14	7,693,060,904	7,050,136,992	81,676,439	21.48	109.12	12.29
Sept. 4	7,847,438,625	7,093,336,534	42,931,858	20.69	110.63	11.42
Nov. 26	7,879,909,390	7,034,844,399	31,152,932	20.35	112.01	10.90
1913.						
Feb. 4	$8,006,144,510	$7,277,541,033	$64,150,535	20.91	110.01	11.66
April 4	7,935,182,211	7,279,022,759	36,246,298	20.44	109.02	11.19
June 4	7,852,875,285	7,124,634,372	72,775,028	20.95	110.22	11.64
Aug. 9	7,710,651,186	7,096,690,069	55,885,510	20.72	108.65	11.66
Oct. 21	8,121,525,868	7,172,162,887	52,045,357	20.54	113.24	10.95
1914.						
Jan. 13	$8,033,720,527	$7,226,346,851	$137,963,141	21.74	111.18	12.22
Mar. 4	8,327,606,673	7,504,577,203	47,529,429	20.62	110.97	11.62
June 30	8,194,611,066	7,495,149,220	41,191,786	20.63	109.33	11.82
Sept. 12	7,847,006,817	7,292,908,772	−30,396,263	19.61	107.60	11.52
Oct. 31	7,729,584,578	7,167,428,909	8,058,918	20.01	107.84	12.19
Dec. 31	8,111,966,207	6,668,325,435	*549,729,803	22.61	121.65	*8.33
1915.						
Mar. 4	$8,379,569,749	$7,065,720,552	$734,112,685	24.86	118.60	8.58
May 1	8,661,858,514	7,197,970,661	727,342,285	24.64	120.33	8.49
June 23	8,504,409,749	7,280,300,276	778,725,284	25.26	116.81	9.29
Sept. 2	8,818,446,691	7,522,977,771	868,755,664	26.18	117.22	9.55

* Due to establishment of the Federal Reserve system.

must be lowered, but experience alone for a period of years will determine the exact percentages which are dangerous or beneficial.

A quicker knowledge of the general trend of monetary conditions in this country will be gained from the weekly Bank Statement, issued every Saturday by the Clearing House institutions in New York city. Bank clearings indicate that something over one-half of the business transactions of 135 principal cities of the United States take place in New York city, and from one-fifth to one-sixth of the demand deposits of the country are lodged in the National Banks here. Hence the condition of the Clearing House Banks in New York city affords an important clue to the general situation in the country at large. The weekly Bank Statement is closely scanned by every active business man and financier. Surplus reserves, surplus deposits, the percentage of loans to deposits, and the percentage of cash to loans, are the principal items. There is always a hidden reserve of loanable funds in New York in the private banks and other institutions not connected with the Clearing House, amounting to several hundred million dollars. Hence, the loaning power of New York city is not fully indicated even by the weekly Bank Statement.

Investors are advised to watch the difference between loans and deposits in the National Banks of New York city. Normally, 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; in 1915 to $205,800,000. When an abundance of money is indicated by the magnitude of surplus deposits, interest rates are sure to be low. One may rely upon it that the captains of finance and the restless spirits in Wall Street, who have been held in leash by a preceding period of high money, are quietly preparing for a revival of business and a bull market in securities. The banks always promote such a movement, because they are naturally desirous of higher rates of interest on their money. The first activity at the stock exchanges may be in the direction of a "shake-out" in prices, in order to eliminate the existing public speculative long interest as far as possible. Within a few months, however, a bull movement in securities will be found under headway and coincidently a revival of business enterprise.

Date	Excess of Loans, –. Excess of Deposits, +. All National Banks	Excess of Loans, –. Excess of Deposits, +. National Banks in New York	Call Money	6 Months' Money	Commercial Paper	Results
September, 1873	–$281,163,000	–$50,000,000	4 to 4½ p. c. per day	7½ to 18	7½ to 18	An alarming panic in progress, with many failures. Four years of depression followed.
April, 1879	+49,265,000	–31,000,000	3 to 7	5 to 7	5 to 7	This was the beginning of a revival, which ran into the great boom of 1880–81. The transfer of over $300,000,000 of Treasury money to the banks accounts for the excess of Deposits in April. Before the end of the year, excess of Loans was again normal, for those times, about $240,000,000.
June, 1884	–316,658,000	–19,000,000	1 to 18	5½ to 6	5½ to 6	Condition of the banks had been slowly growing worse for more than a year. A panic in stocks occurred and business was deranged.
July, 1885	–196,949,000	+79,000,000	½ to 2	2¾ to 4¼	2¾ to 4¼	Banking conditions had slowly improved, and July was the turning point for a handsome advance in stocks.
August, 1887	–526,059,000	–3,000,000	3 to 8	6 to 7	6 to 7	A setback in stocks resulted from the state of facts here shown and the higher interest rates; but conditions promised a speedy recovery of strength by the banks; and other conditions were favorable. A bull market started in stocks, which ran on until 1890.
December, 1890	–459,730,000	–9,500,000	3 to 188	6½ to 9	6½ to 9	Barring an occasional flurry, money had remained easy until into 1889. Then loans began to grow. While the bull movement continued until June, 1890, condition of the banks became gradually strained; and finally this began to tell. A heavy reaction in stocks occurred in the Fall of 1890, ending in November. The Baring failure in November merely accented a bad situation here.
July, 1893	–494,242,000	–20,000,000	2 to 74	6 to 8	8 to 15	The banks were not in good shape, except at intervals, in 1891 and 1892, and in 1893 great monetary stringency developed. A first class panic broke out in March.
December, 1898	+54,594,000	+91,500,000	2 to 4½	3 to 3½	3 to 5	In June, the New York banks had the largest excess of Deposits then on record, $129,000,000, and the banks of the country at large made their high record in December. Business began to revive, and securities started for a long and great bull market. Money was said to have gone permanently on a 3 per cent. basis.
February, 1902	+162,794,000	+82,000,000	2 to 3	3¼ to 4½	4 to 4½	The banks had great resources. A great bull market had been in progress. Money rates began to rise, but no weakness was disclosed.
September, 1902	+47,774,000	+1,300,000	3½ to 35	6 to 7	6 to 7	Excess of Deposits in New York vanished in October. Bank resources were so low that loans were called. Stocks began to react. First symptoms of coming panic.
November, 1903	–10,735,000	–40,000,000	2 to 9	5 to 6	5¾ to 7	The banks had been in bad shape all the year. Bursts of liquidation had eased the strain, from time to time; but securities were severely depressed until October.
June, 1904	+162,211,000	+65,000,000	1 to 1½	8 to 3½	3½ to 5	Banks full of idle money. In August, Surplus Deposits in New York reached $110,500,000. Big interests were accumulating stocks for one of the greatest bull markets in history.

September, 1906	+60,733,000	−37,500,000	2 to 40	6½ to 7½	6½ to 7½	End of the bull market. Business was rushing ahead in great volume, but the banks in New York had been staggering under a strain for months, and could finance the boom no farther. No hope, except through liquidation.
December, 1907	−7,739,000	−111,500,000	2 to 25	6 to 8	8 No business	Surplus Deposits in the nation at large had been steadily running down ever since January. In New York, bank resources had been exhausted for months. The panic of 1907 was inevitable. A frightful decline in securities took place, lasting until October. Liquidation brought relief to the banks, at last.
May, 1908	+315,745,000	+75,000,000	1 to 2	3½ to 3¾	3¾ to 4½	Banks glutted with idle money. Business was reviving and another bull market had started in stocks.
April, 1909	+375,761,000	+49,800,000	1½ to 2¾	3 to 3½	3 to 4½	Enormous surplus deposits keep money easy, in spite of a great speculative campaign in stocks. Securities were yet rising. In New York, Surplus Deposits increased to $79,000,000 in July.
November, 1909	+210,764,000	−17,000,000	2½ to 6	4½ to 5	5 to 6½	Beginning of the end. Interest rates rose. Surplus Deposits were declining. Liquidation was in order. A heavy decline in stocks and a setback in business were foreordained.
November, 1910	+70,261,000	−40,300,000	2 to 3¼	4¾ to 5¼	5 to 6½	In New York, the banks had been in poor shape all the year. Liquidation in stocks ended in July; but there was no life in the rally, which ensued.
March, 1911	+258,650,000	+42,900,000	1 to 2½	3 to 3½	3½ to 5	Position of the banks was now much improved. The improvement in business and stocks began from this month.
February, 1912	+401,551,000	+77,800,000	1¾ to 2½	3 to 3½	3½ to 4½	Plenty of money in the banks. Surplus Deposits in the whole United States, largest in history. Business begins to improve, and stocks entered upon a strong rise, which ran along until April, after which there ensued several months of hesitation, growing out of National politics.
August, 1913	+238,929,000	−5,400,000	2 to 2½	5 to 6	5¾ to 6¾	Stocks had been declining and business had been backward since the Fall of 1912, when the Balkan War had started European liquidation of American securities, and when a low tariff administration had been elected in this country. Position of the banks was due to foreign liquidation.
June, 1914	+369,140,000	+98,800,000	1½ to 2	3 to 3¼	3½ to 4¾	Money was easy and a bull market in stocks was in progress. Outbreak of general war in Europe, the last days of July, put a sudden end to this fortunate situation.
September, 1914	+393,341,000	−107,700,000	6 to 8	7 to 8	6 to 7½	There had been a panic in New York. The stock exchanges of the United States were closed for over 4 months. Business received a setback. The figures show that the New York banka were bearing the brunt of gold exports and foreign liquidation.
September, 1915	+501,070,000	+200,742,000	1¾ to 2	2¼ to 3¼	3 to 4	Business was booming, on war orders from Europe. A wild bull speculation prevailed in stocks, promoted by the ease of money.

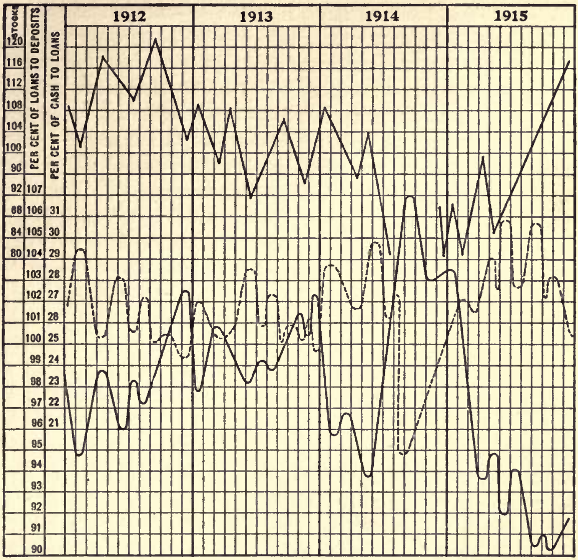
On the other hand, when surplus deposits are dangerously low, a situation will be revealed which may and commonly does foreshadow a decline in stocks and a reaction in business, sometimes an actual crisis.

In New York, the danger line was formerly about $30,000,000 excess of deposits over loans. When surplus deposits had fallen to that narrow margin, the cause needed to be looked for in the over-extension of general trade and manufacturing, the excessive promotion of new business ventures, and over-speculation in securities. The country was then hurrying on toward a general reaction and perhaps a panic. Since the Federal Reserve system now governs the banks of the country, the danger line must be placed far higher, but an exact fixing of the line must be deferred until the country has had a longer experience with the new financial régime.

Previous to the resumption of specie payments, January 1, 1879, an excess of loans over deposits was the chronic state of affairs in the New York banks. October 25, 1873, the excess of loans was fully $87,000,000. Specie had been driven out of the country in enormous amounts by paper money inflation. To some extent, gold had been hoarded by individuals. Gold formed a relatively small part of the cash holdings of the banks. Great bull markets in stocks had been carried on during that period, through the use of paper money and bank credits; but after the resumption of specie 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. Importance of surplus deposits will be illustrated by the tabulation on pages 76 and 77.

A graph of the course of "Loans to Deposits" and "Cash to Loans" in the banks of the New York Clearing House is presented on page 79. Other factors remaining stationary, then when the two curves draw apart, with "Cash to Loans" above the other, monetary conditions favor a rise in stocks. When the "Cash to Loans" curve falls below the other, as in the latter part of 1914, or when the two curves approach and cross each other aimlessly, monetary conditions are unfavorable to stocks. The break in stocks in May, 1915, was due to the tragedy of the sinking of the *Lusitania* by a German submarine and the consequent fear of war between the United

CASH, LOANS AND DEPOSITS, NATIONAL AND STATE BANKS IN NEW YORK CITY.



Dotted line, Cash to Loans.
Continuous curved line, Loans to Deposits.
Zigzag line, Course of Price of six leading Stocks.

States and Germany. When that fear was dissipated, stocks at once responded to favorable monetary conditions.

When the banking situation becomes dangerous, as indicated by the diminution of Surplus Deposits, and especially after they have fallen below zero, and by the falling percentage of Cash to Loans, 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 deposit of Government money in the banks, an inflation of the currency, extensive foreign purchase of American goods and securities, or some other influence cannot be brought into play to recruit the exhausted resources of the banks, then there is no other recourse except liquidation of stocks and a slowing down of business enterprises 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.

Call money in New York is the quickest to feel a trend toward unfavorable conditions. Call money is declared to be the answer of the banks as to the way a present situation sums up. Time money represents the outlook for the future. When call money is up to the income yield of stocks, danger begins to develop. When time money is up to the same level, then the storm is at hand. Low rates for money, higher prices for securities. High money, lower prices for securities.

EARNINGS

2. The value of the whole body of good securities, and of each particular one, depends partly 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. Earnings must be considered a separate and distinct force in the security markets. They are both an index of the times and a barometer of approaching financial weather.

Growing earnings mean higher prices for 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, 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 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 $219 as in the Fall of 1909, is regulated primarily by the earnings and 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 stock. Missouri Pacific passed its dividend in 1891 and worked down from $77 a share to $10 in 1897; 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. Later, the stock rose 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. Why did American Beet Sugar, common, rise from $9½ a share in 1908 to $59¾ in 1911, before there was ever a dividend on the shares? It was because earnings were so handsome, that early declaration of dividends was inevitable.

That is the broad principle. illustrated in the security markets by thousands of instances.

The market in 1915 was full of striking examples of rise in price among non-dividend common stocks, which had resumed dividends after a long suspension or were approaching the time when initial dividends would be declared, based on unheard-of earnings.

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

Railroads now issue monthly reports, and annual reports, 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 relative prosperity of the several lines and systems. Among industrials, the best example of candor in dealing with the public is shown by the United States Steel concern, which issues once a month a statement of the increase or decrease of orders on hand, and once a quarter an elaborate statement of profits and state of the business. These reports furnish one of the most valuable items of news in the financial papers. There is a growing tendency in these times among industrial corporations to publish quarterly reports of earnings.

In former times, and especially from 1873 to 1893, earnings of the railroads were mainly influenced by the crops, the general activity of trade, and the state of harmony or competition which existed between them. Those factors have lost none of their importance, in these modern times; but others, entirely new, or previously obscure factors have now come actively into play.

Those halcyon days have passed when railroad managers could raise their rates, at will, to meet a higher cost of operation, or manage their properties free of restraint. From time to time, a wave of popular hostility to railroads sweeps across this country, and is exhibited in a determination to extract the last possible dollar from the companies in the form of taxes and to burden them with expensive rules and regulations. In New York State, there is one prosperous rural township, highly cultivated, through which six miles of railroad line have been built. The local assessors so handle the subject of assessments, that the railroad is made to pay about one-sixth of the whole taxation of the township. From this rural board of assessors, all the way up through State authorities to Congress itself, the same disposition exists to tax and burden the railroads to the limit of endurance. In many localities in the United States, the local population almost entirely escape taxation, owing to the expense being assessed on corporations. Mr. Yoakum has calculated that the transportation companies are now paying $200,000,000 a year more than formerly, in consequence of State and National laws, some of which are ridiculous, because they impose expense without bringing the slightest benefit of any kind to the public, or a dollar of new earnings to the companies.

Under either State or Federal laws, the following features of the railroad business are now subject to regulation:

Freight and passenger rates. Rebates, pools and passes are forbidden.

The issue of stocks and bonds.

Number of men composing the train crews—in numerous cases extra brakemen being ordered by law, who are not needed for operation of the trains, and who are simply carried as passengers.

Hours of labor, as set forth in 8 or 9 hour laws, 16 hour laws, and so on.

Carriage of commodities in which a railroad is interested (except timber and lumber) is prohibited.

Number, character and location of couplers, grab irons, brakes, draw bars, and other "safety appliances."

Compensation to injured workmen.

Maintenance of way, grade crossings, switch connections, and provision for interchange of traffic.

Operation and maintenance of telegraph and telephone lines.

Size and commodiousness of stations, entailing employment of extra men at the new stations.

All combinations and agreements are forbidden, except those of labor, leaving to irresponsible labor unions almost autocratic power over wages and thus over earnings.

So minutely and exhaustively are the railroads now regulated by law, that in the words of the late J. C. Stuart, vice-president of the Erie, "the sole remaining responsibility of the investor is the burden of loss of his investment."

During 1912 and since, labor unions have become more aggressive in the United States in demanding shorter hours, higher wages, and recognition of the unions; and a dangerous shibboleth has been heard, especially among the Industrial Workers of the World, to the effect that "labor is entitled to all it produces." In the minds of Socialists this really means the entire profits of all industries employing labor. The saying "labor is entitled to all it produces" grows out of a muddled and fallacious conception of the meaning of Adam Smith, in his discussions of the causes of "The Wealth of Nations." Labor may be entitled to all it produces, without the aid of capital. But capital also is entitled to all that it produces, with or without the intervention of labor. The fact is, neither has been able up to the present time to operate without the other. When capital and labor unite in production, each is entitled to its share of the profits. Undoubtedly, courageous discussion of the respective rights of capital and labor will eventually correct all error in the minds of labor on this point. But meanwhile, the aggressiveness of the labor unions has a distinct bearing on corporate earnings.

With regard to railroad earnings, an excellent practice, for any one who has a large interest in the bonds or stocks of a particular line, is to tabulate the earnings, month by month, and figure out how much the road should earn in each month to meet fixed charges and dividends. The method shown below is merely an approximation, because no one can tell until publication of the annual report, whether fixed charges have grown appreciably or not. But a tabulation of this sort indicates, closely enough for all practical purposes, whether or not dividends are safe or in danger. It was from such an analysis of the current earnings of St. Paul, that the author was able to predict, long in advance, a reduction of the 7 per cent dividend to 5 per cent at least, and which showed later unmistakably that St. Paul's 5 per cent dividend was in danger. Every road has peculiarities of traffic; but, as a rule, when the crops are going to market in the Fall months, earnings are then the largest of the

EARNINGS OF CHICAGO, MILWAUKEE & ST. PAUL, BY MONTHS

	Monthly Gross	*Final net from operation, less taxes	Per cent of annual net, earned in each month, average of last 7 years	Amount required monthly, to pay fixed charges: 7 p. c. on preferred, and 4 p. c. on common
1914.				
July	$7,284,985	$2,381,851	8.90	$2,599,000
August	8,189,201	2,149,240	9.56	2,792,000
September	9,240,207	3,205,773	11.35	3,315,000
October	8,873,520	2,682,279	13.05	3,799,000
November	7,379,909	1,646,072	9.17	2,679,000
December	7,282,244	1,823,540	8.12	2,372,000
1915.				
January	6,696,115	1,349,512	4.87	1,423,000
February	6,472,695	907,320	3.86	1,128,000
March	7,544,389	2,473,753	9.66	2,821,000
April	6,877,038	1,554,302	6.18	1,805,000
May	7,244,202	1,639,630	6.37	1,863,000
June	7,810,869	2,821,834	8.91	2,604,000
Totals	$91,435,374	$24,635,106	100	$29,200,000

* To final net from operation, add $\frac{1}{12}$th of the yearly "other income," or $304,142 a month.

year. In January and February, when snow blockades occur, profits are the smallest. On page 84 is a statement of St. Paul's earnings for the last fiscal year, which should serve as a type for other similar tabulations.

The figures are compiled from the monthly returns to the Commerce Commission and the total of net was slightly changed in the final annual report. They show that St. Paul did not quite earn the 4 per cent for the common shares, in the fiscal year of 1915. A certain sum was taken from Surplus Profits account to make up the 4 per cent payment.

ANNUAL AGRICULTURAL PRODUCTION

3. A HUNDRED millions of people must have food and clothing, but the crops have an economic value for additional reasons. The soil of the United States produces new wealth from the ground annually, while distribution and exportation of this produce supply an immense tonnage of freight to the railroads and materially swell the balance of foreign trade in favor of the United States. In 1915, the total weight of the five principal grain crops alone amounted to 148,000,000 net tons. An average cotton crop of 15,000,000 bales weighs 3,750,000 tons, all of which is moved by railroad. These figures suggest the value of the crops to the railroads. At least one-fourth, and on many Western lines 40 to 50 per cent of the gross freight tonnage of the railroads consists of food products. Besides cotton, corn, wheat, oats, rye and barley, there is a vast additional quantity of hay, potatoes, tobacco and fruit carried by the railroad cars from the centers of production to other parts of the country. The rush of crops to the markets and the seaboard in September, October and November explains why gross traffic in those months exceeds that of other months of the year.

The productions of the soil powerfully affect 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 at Washington, approximate a money value ordinarily of $9,000,000,000 and in 1915 their farm value was $9,730,000,000. A fluctuation of $500,000,000 to $1,000,000,000 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 bumper crops. Depression has, at times, begun with partial crop failure. The profits, and therefore the shares, of railroad lines which run through and from the grain and cotton sections of the country, are affected in the most direct and powerful fashion by generous or stunted crops; and as they go, ordinarily, so goes the general market.

As already noted in the chapter on Cycles, it is fair to assume that, after about three years of unfavorable weather conditions and moderate crops, there will ensue an equal period of good conditions and ample crops. And vice versa. According to this theory, 1916, 1917 and 1918 should be poor crop years. It will also be of interest to bear in mind the singular fact, that years of maximum sun spots have usually been attended with a falling off in the production of cotton. 1916 will be the next date.

Abundant harvests mean normally low cost of food; an excess production for export; great earnings for the railroads (ensuring bond interest and dividends, and often an increase of dividends); low priced raw material for the corn product, cotton seed oil, and other industries; and a larger money return from foreign trade, as well as prosperity among farmers and planters who are large buyers of manufactures. In one way or another, handsome crops are a magnificent stimulus to practically every department of business enterprise in the United States. They are a tremendous force. Other things being equal, a series of good crop years means good times or a quick recovery from depression and better prices for securities. A succession of poor crops or a bad failure in any one year almost invariably exerts a reactionary influence upon trade and securities and has more than once led to a moderate panic.

Cotton, in which the United States leads the world, is our principal agricultural money earner in the foreign trade. Of agricultural produce of all classes, we export from $800,000,000 to $1,000,000,000 worth, annually; and almost one half of this consists of cotton. Were it not for these huge exports of cotton, the United States would be obliged to export hundreds of millions of gold, every year, or find some other way to pay for its imports of goods and securities.

Could all the arable land of the United States be brought under tillage or under irrigation, and especially under intensive cultivation, the crops of grain would be twice as large as they are at present. Of the total area of the United States upon this continent, amounting to 1,903,289,600 acres, only 46.2 per cent is in farms (878,798,325 acres), and one-fourth of that is unimproved and not covered by forests. The United States has a capacity for production twice or thrice as large as ever known. There is great hope for the railroads in future years, in this fact. They appreciate the fact keenly, as witness the efforts of many of our important trunk lines to educate farmers in their territory in more profitable production from their lands.

There is no topic more deserving of interested attention than the state of the crops. The United States Department of Agriculture issues monthly reports on condition of the grain crops, on or close to the 8th of each month, beginning in March and continuing until November. In December, a final report is published on or close to the 15th. In May, the reports begin to include hay. Beginning in June, the monthly report refers also to apples, peaches and sugar beets. Beginning in July, potatoes, tobacco, flaxseed and rice are also reported upon. Intermediate reports as to the condition of numerous minor crops are published on the 8th of each month, beginning in March. The initial report of the year on cotton is published on or about June 1st, and similar reports are given to the newspaper press on the 1st of each succeeding month until October inclusive. The final report comes out about December 10th. One of the best of the New York financial dailies also compiles its own estimate on cotton prospects.

DOMESTIC TRADE

4. A SLACKENING of internal trade and manufacturing after a great boom precedes every financial crisis. Investors must be quite as alert to detect the signs of a coming change as are the bankers, rich men and stock market operators. It is axiomatic that railroad earnings are directly and seriously affected by active or dull times; and the state of trade requires constant attention, never more so

than when a boom in business or a reaction has run for a series of months or years.

Data as to the course of trade are supplied by: (1) The *Iron Trade Review* and *Iron Age,* two weekly newspapers, devoted to the iron and steel trade. (2) Reports, which are published in the daily sheets, emanating from two mercantile concerns in New York city, Dun's and Bradstreet's. (3) Various sound and conservative financial publications, including *The Financial Chronicle, The Journal of Commerce,* and *The Wall Street Journal* of New York, and *The Boston News Bureau* and *The Boston Commercial* of Boston, make a specialty of valuable commercial and financial reviews. *The Financial Chronicle* reports bank clearings in all the principal cities of the United States. From these publications, the business man and the owner of securities can detect a quickening or slackening of business enterprise and shape his course accordingly.

The state of domestic trade touches our population more quickly and affects their interests more powerfully than does the foreign trade. The total volume of domestic trade has never been computed precisely, but it certainly amounts to at least 500 billions annually, whereas foreign trade seldom exceeds an aggregate of four billions.

COMMERCE WITH FOREIGN LANDS

5. A FRUITFUL source of new money supplies is the foreign trade of the country, when the balance of imports and exports is in our favor. Conversely, an adverse balance in foreign trade imposes a serious drain upon the financial resources of the banks.

The Government issues a monthly statement of imports and exports, both of merchandise and specie, setting forth the balance of trade and in abundant detail the whole character of the exports and imports. The statement, summarized, is printed in all the daily newspapers. Statistics are sometimes dry reading, but those of foreign trade are never so. To financiers, they are always eloquent.

Rival economists differ as to the advantage of a large balance in favor of any country in foreign trade. It cannot be denied, however, that a large balance is a force in finance in the United States and influences the value of American securities, both in general and in particular. For instance, the huge export trade in fabricated iron and steel affects the value of the shares of the United States Steel Corporation, while the wonderful bull market of 1915 in the so-called "war shares" was due entirely to the immense exports of this country in munitions of war.

In spite of the wonderful expansion of wealth in the United States during 1896–1907, which gave that Cycle a unique position in American annals, our country is yet in urgent need of billions more capital for development of its natural resources, its manufactures and its transportation lines. The bulk of the new capital may be looked for from savings, our own annual increase in wealth and production of gold. Yet a succession of favorable balances in foreign trade with other continents contributes powerfully toward the funds which are required.

Normally, when the balances of trade in our favor are large, gold is imported from other lands. At such times, Europe usually buys American securities and this also favors gold imports. When the balances are small, gold is exported; and usually, at such times, Europe has the distressing habit of selling back to us a large volume of our securities. A glance at the Statistical Abstract and other Governmental compilations will reveal the facts as to the balance of trade and gold exports or imports. Gold is the leading basis of bank credits. More than one smart advance in stocks has followed large importations of gold. Many a setback in prices has been due to lively gold exports. The booms of 1902 and 1908 are modern instances of the effect of large balances in foreign trade attended by gold imports. The setback in 1910 was coincident with a heavy decline in the balance of foreign trade and large exports of gold.

When the United States enjoys a heavy favorable balance in its foreign trade, leading capitalists revel in that fact and usually buy stocks, in part to meet an expected foreign demand for them.

TARIFF DUTIES ON FOREIGN GOODS

6. Since July 4, 1789, when the Congress of the United States first established a schedule of duties on imports, something more than 190 tariff laws have been enacted. Among this number, 23 laws established a general revision of the duties. While the pro-

priety of high or low duties has been a subject of dispute since the adoption of the Constitution, no one will contest the assertion that a substitution of duties, framed to protect and stimulate home manufactures, for duties aiming at revenue only, or vice versa, has always been a momentous event and has profoundly affected the general course of business and trade and thus of securities. The author has tabulated and compared the 23 principal tariff laws and has examined the history of the times in each case, with a view to discover the economic consequences of each act. This study has revealed certain inflexible facts.

Every period of general prosperity which the United States has ever enjoyed, for 80 years or more, every period of good prices for securities, has been coincident with protection to manufactures under the tariff laws, or the promise of speedy enactment of a protective tariff. Conversely, every period of depression in business and lower prices of securities has been coincident with reduced duties on foreign goods or threat of the speedy enactment of a lower tariff. This statement does not affect the question as to whether or not it would be possible for manufactures to thrive, with duties about like those of the Payne Tariff of August 5, 1909, for instance. But it does bear on the question as to whether good times will prevail, if the principle of protection is wholly eliminated from the laws. Manufactures have been built up in the United States by protection; and billions of capital are invested in the plants, while more than 7,000,000 men and women, and their families, derive their daily bread from the wages earned in these establishments. It is a vast interest, whose prosperity depends upon maintenance of the home market for American capital and labor.

Tariff laws are a tremendous force in financial affairs; and everything which affects our economic policy is of absorbing interest to the owners of securities. Here are a few facts bearing on the subject:

March 2, 1833: Enactment of the Clay compromise tariff, which provided that all duties over 20 per cent should be reduced, by deducting 1/10 of the excess, annually, from December 31, 1835, until, by June 30, 1842, all the excess over 20 per cent should have disappeared. This law was slow in its operation and trade flourished for several years; but gradually, as the duties came down, things began to work badly, and the lower tariff was one cause of a long prostration of business and the panic of 1837. Excess of imports increased from \$6,349,485 in the fiscal year of 1834 to \$52,240,450 in 1836, which was large for those times.

August 30, 1842: A higher tariff was enacted, cutting down imports and wonderfully stimulating trade and manufactures, and turning an unfavorable into a very favorable balance of trade. Good times ensued for several years.

July 30, 1846: Again a lower tariff became law, increasing imports steadily, and bringing about sluggishness in trade. Excess of imports had mounted to \$60,760,030 by 1854.

March 3, 1857: A general reduction of duties was enacted, amounting to about 20 per cent. This was one of the inciting causes of the panic of 1857. Liquidation set in, several months before the law was enacted, and as soon as its passage was discovered to be foreordained. A terrific panic followed. By 1860, the business interests of the country had been reduced almost to insolvency. From \$38,000,000 to \$59,000,000 of gold had been going out annually.

March 2, 1861: Enactment of the Morrill protective tariff law. The rise of American manufactures dates practically from that law. The good times, which followed in the North, and the extraordinary rise in securities, lasting until 1864, grew in part out of the immense disbursements by the Government for war material and the issue of a flood of paper money. But it is known to all men, that the Morrill tariff law contributed powerfully toward the same end, and would have been sufficient without inflation of the currency. Duties were increased by the laws of July 14, 1862, and June 30, 1864.

June 6, 1872: A general reduction of about 10 per cent in duties was enacted. In this case, the lower tariff was only one of the lesser causes of the terrible panic of 1873, but it was an influence directly tending to produce the result.

March 3, 1875: The 10 per cent reduction of 1872 was repealed. Good times did not start immediately. Several weak spots in the financial situation had to be eliminated first. But when soundness had been restored all around, the tariff law of 1875 gave a powerful impetus to business, and was instrumental in the great boom of 1880–1881. It led to enormous favorable balances in foreign trade (\$264,661,666 in 1879).

March 3, 1883: A new law was placed on the statute books, enacted by the friends of protection in deference to popular clamor. A few duties were raised. Others were reduced. On the whole, the new scale of duties was lower and distinctly unfavorable to the textile trades, which suffered severely. The severe setback of 1884 and 1885 was largely the consequence. General business finally recovered somewhat, thereafter, but manufactures were not flourishing. The favorable balance in foreign trade gradually ran down, until in 1888, there was an excess of \$28,002,607 in imports.

October 1, 1890: The McKinley protective tariff bill was enacted. Securities began to rise and business to improve, from the moment of the election of a protective tariff administration in 1888 (Harrison). Prosperity lasted for four years, namely, until 1892.

August 27, 1894: The Wilson revenue tariff became a law, under Cleveland. President Cleveland had been elected in 1892; and from that moment, business and stocks became retrograde, due to alarm over the tariff, culminating in the panic of 1893 and the long depression, which did not end until 1896.

July 24, 1897: The Dingley protective tariff became a law. McKinley had been elected President in 1896, and the tide of business and securities turned definitely upward from that day. The era of prosperity which ensued needs hardly to be described. It was unexampled in history. Securities reached the highest prices ever known, in many cases, and wealth increased by leaps and bounds.

August 5, 1909: The Payne tariff became a law. The American public has refused to accept this law as instituting lower duties. It is true that a few, extremely few, duties were slightly raised. The cotton and woolen schedules remained practically unchanged. But on a large number of articles, the duty was heavily reduced, being cut in half in many instances; and this fact, together with the prospect of farther revision, proved a serious brake on manufacturing enterprise, especially on profits.

October 3, 1913: The Underwood Revenue Tariff became a law, a low tariff administration having been elected in November, 1912, by reason of a split in the protective tariff party. Business became retrograde in the United States immediately after the election. A large variety of articles were placed upon the free list by the Underwood law; and the duties upon nearly all manufactures were substantially reduced. Trade and manufacturing gradually slackened in the United States; and business revival set in in 1915, only upon the receipt of orders from Europe for more than a billion dollars' worth of food and war munitions. This revival rests upon an insecure foundation. When the war ends, American manufacturers will be exposed to a fierce competition under the present schedules of duties.

All writers on crises unite in giving great weight to tariff changes. Investors are directly concerned in the subject.

COMPETITION

7. 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 competition 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 and the establishment of equal rates by the Inter-State Commerce Commission have, in these modern times, minimized rivalries but they have by no means abolished them.

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 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 sold at $329 in 1865, and even after a stock dividend of 33⅓ 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 $30⅞, and by 1871, Panama was down to $49. The whirligig of time has wrought a curious change in the relations of the transcontinental lines with the Panama route between the East and West coasts of the country. Opening of the Panama Canal has brought back to that route a part of the traffic, which was long diverted to the lines across the plains.

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 $81¾ 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. It is important for an investor to be wide awake to every sign of coming serious rivalry against companies whose stocks he owns.

GOLD PRODUCTION

8. 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 1912 was nearly $466,000,000.

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.

MINOR FACTORS

Economists, who endeavor to establish an Index Number, or barometer, which will sum up and express in one figure the average effect of all fundamental economic factors, take cognizance of various other matters, in addition to those named above. They include:

Mercantile failures and bankruptcies.
Statistics of new building construction.
Average price of leading commodities.
Number of letters carried in the mails.
Velocity of money in circulation.
Labor conditions and statistics of immigration.
Course of price of a group of stocks.
Volume of stock market transactions.
Number of idle railroad freight cars in the country.
Bank clearings in the principal cities.

These subjects are all of interest, but they practically all follow the 8 great fundamental economic factors, affecting the trend of business and securities as set forth in detail above. These 8 are sufficient for the guidance of a practical man. Some economists figure out as many as 30 fundamental factors, each of which should be studied. The late J. P. Morgan recognized only two, Money and Earnings.

THE BIG MEN IN FINANCE

A brief allusion may be made to one other force in affairs, which, however, is more correctly the logical product of Fundamental Economic Factors rather than a separate and additional member of the group, namely, the attitude of the captains of trade, industry and finance toward business and securities. In every generation, there have come to the front a certain number of able men, whose intense nervous energy, ambition, initiative and clear vision have enabled them to tower head and shoulders above their fellows and who have led all the great movements for development of the resources of the country and the promotion of its manufactures, trade and financial importance.

These men have risen to wealth. Some of them founded and made a part of their fortunes in business pursuits. The Vanderbilts, Astors, the Rockefellers and their associates, the Havemeyers, the Dukes and their associates, Mr. Carnegie, E. H. Harriman, John A. Stewart, John W. Gates, Daniel G. Reid, H. C. Frick and a large array of other brilliant men gained fortunes originally through the creation of great and profitable lines of practical business. But with remarkably few exceptions, these and other men prominent in finance for the last half century in the United States have gained a large part of their wealth through transactions in securities, for the execution of which they employed the capital, previously acquired in business pursuits.

The power of those men in the business world and the security markets when they are united, is almost unimaginable. Not only can they bring vast wealth of their own to the development of business enterprise and purchase of securities, when they deem it proper to do so, but they have such relations with financial institutions, banks, trust companies, insurance companies and railroads, in which they have investments, that they are able to influence the employment of enormous capital, in addition to their own, for any desired operation. They are the men who finance great business undertakings of all kinds when conditions are ripe, who promote manufactures, railroad building and business booms, who provide employment for hundreds of thousands of their countrymen and who are the inspiration of every important bull market in stocks.

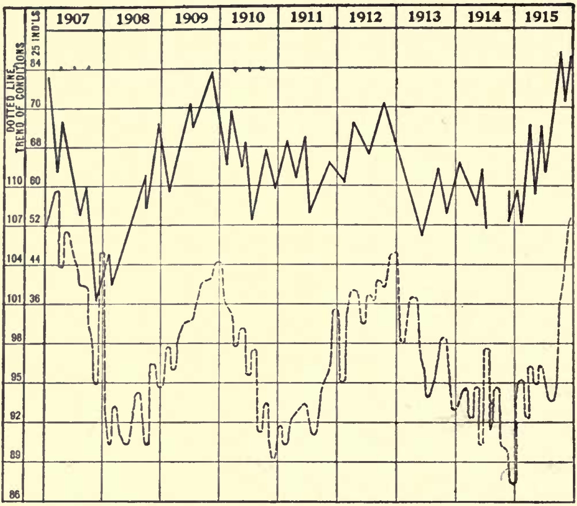
The attitude of the captains of finance, trade and manufacturing is of great importance. It is, however, the product of fundamental conditions. These men are masters of the art of judging conditions and they invariably conform their practice thereto. Leaders always take a position with reference to the long look ahead. The private individual who is a competent judge of conditions need never be in doubt as to the attitude of the big men toward business and securities.

INDEX NUMBERS

An Index Number is arrived at by selecting a large group of Fundamental Economic Factors, giving each one a value in figures, adding up the column of figures, and dividing the total by the number of items in the column. Different authorities employ different methods and different units to arrive at their Index Number. Bradstreet's selects such units as will most clearly reveal the trend of trade. Other economists both in America and England adopt a basis for their Index Numbers, which indicates the trend of money and securities. All the Index Numbers have important value and each one is worthy of the interested attention of business men and investors. The author of this book has made an effort to tabulate such factors as bear most directly upon the value of securities. Students of this subject would do well to study Irving Fisher's "Purchasing Power of Money" for a glimpse of the manner in which at least one Index Number is arrived at. The author's Index Number, adopted after many experiments and after many changes of plan, shows the trend of underlying Conditions affecting Money and Business, as set forth below. For comparison, a line is introduced into the chart which indicates the course of average price of 25 industrial shares at the New York Stock Exchange. Industrials have been more responsive to monetary and business conditions in recent years than the railroad issues, the latter having been subject to special influences emanating from the laws and the regulation of rates by the Commerce Commission.

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.



Index Number of Conditions and the Stock Market.
Dotted line, Index Number of Conditions affecting the Stock Market.
Zigzag line, Course of Price of twenty-five Industrial Shares.

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 stocks 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 two, 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 6 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.

VIII

GOVERNMENT OWNERSHIP

OPERATION OF THIS SYSTEM ABROAD, COMPARED WITH EFFICIENCY OF MANAGEMENT AND SERVICE IN THE UNITED STATES.—WHEREIN THE SUBJECT INTERESTS THE OWNER OF SECURITIES.

THE Constitution of the United States, adopted by the sound and courageous men, who had won the Independence of this republic, was framed to secure certain definite objects, two of which were "to provide for the common defense" and "to promote the general welfare." It has always been understood by Americans, born of the old stock of original settlers and founders of the Constitution, that, in this country, it is not the province of Government to engage in any form of practical business in competition with its own citizens, or to undertake any form of business, which its own people are competent and willing to carry on. In Europe, for military reasons, various Governments have ignored a principle, which is fundamental in the United States, and they now own and operate railroads, telegraph and telephone lines, and some other public utilities. Within the last generation in the United States, the restless desire for change in many not well balanced minds and the socialistic leanings of labor unions, composed largely of workmen of European descent and full of European ideas, have led to propositions for Government Ownership of public utilities in many cities of this country, in several States, and in the Nation at large. Municipal ice plants have been established in several cities, gas plants in some, and local street railroads here and there. Some of these are leased to private operators; others are operated by the municipalities themselves. New York city owns and operates the ferry to Staten Island. Georgia has a short State railroad. The United States once partly owned a great United States Bank. It now owns the Panama Canal and the Panama Railroad and is constructing a railroad in Alaska, while Government Ownership of telegraph and telephone lines has been assiduously urged by the Post-office Department, and of a large fleet of ocean-going merchant steamers by President Wilson. A part of the express business of the country has been taken over by the Post-office Department.

This subject is of sufficient interest to the owners of railroad, gas, telephone and telegraph securities, as well as to the people at large, to deserve a few words of discussion in this book. Government Ownership is not necessarily a Fundamental Economic Factor, although it bears on the value of railroad and other securities. The subject deserves separate treatment.

Government wires were first conceived in Militarism. When they were first introduced in Europe, it was with no other thought than that the service was military in character, and could be used to military advantage in facilitating communication. See Professor Holcombe's book on "Public Ownership of Telephones on the Continent of Europe." Wire service was not even opened to public use, at first, but could be used only for military purposes. It originated with the optical telegraph, in France. This was later adopted by Prussia and England, and was succeeded by the electro-magnetic telegraph. The idea that the telegraph could be built up by private enterprise upon a commercial scale for public use, was completely obscured by the military feature. Government management of telegraphs in one country of Europe, of course, meant Government Ownership of telegraphs in all. The principle of competitive militarism would permit no other course. Consequently, when the telephone came into existence, it was regarded, abroad, as a sort of telegraph. In some countries, on that theory, it was made part of the postal service, together with the telegraph. In others, its development was allowed under private enterprise, until the efficiency of the latter forced the governments to take over the telephone in self-protection. "No country," says Professor Holcombe, "was able to retain the possession of its telegraph system, and at the same time leave the telephone in alien hands. The conflict of interest was too sharp. No country cared to abandon its telegraphs. Therefore it was compelled to acquire the telephone. . . . The historical truth is that the policy of private ownership under public regulation never had a fair trial." In the United States, the telephone, telegraph and the railroads all originated in private enterprise and were developed by private capital.

In an undertaking as vast and costly as the Panama Canal, the construction of which would have exceeded the ability of private capital (as witness the fiasco of Ferdinand de Lesseps, who attempted to build the canal with French private capital), the enormous expense supplied a ready, acceptable, and perhaps sufficient excuse for leaving that particular project to the National Government. The same excuse was found for the construction of State highways and State canals. But that argument does not apply in any respect to the proposition that the Government shall take over American railroads, telephone and telegraph lines, and other national utilities, already in existence, already built, already in successful and efficient operation. There are the lines, already. Such extensions of these public utilities as are demanded by the growth of population and settlement of the prairie and mountain States of the West, can readily be furnished by private capital, and will cheerfully be furnished, provided that the laws render the investments safe. Judicious and sympathetic regulation of these utilities, in order that the expense of operation to the public shall not be excessive, seems to be all that is required in these modern times to secure subscription of practically unlimited capital for extensions.

No military reason exists for Government Ownership in this free, peaceable and independent republic. During the late Civil War in the United States, it indeed became expedient for military reasons to create a system of transcontinental railroads from the Mississippi River to the Pacific Ocean. The Government did not itself build them. It inspired private capital to perform the work and take the risk, by donating a large acreage of unoccupied land in the West to companies, which would agree to construct the roads. Private capital came forward promptly and patriotically and the roads were built. The Panama Canal was undertaken, in part for military reasons. But no such reasons exist for the construction of a Government railroad into Alaska or for Government Ownership of the already established railroad, telegraph, telephone or express services of the country. Private capital is adequate to all requirements, and will be supplied without limit, if the policies of the Government encourage private enterprise, reasonably, in accordance with the spirit of our institutions.

Sixty years ago, when vessels propelled by steam began to replace the magnificent clippers and sailing packets, which were carrying the American flag and American prestige into every ocean port in the world (and incidentally were transporting the bulk of the exports and imports in our foreign commerce), our Government found it expedient to create a fleet of American steamships, both for economic and military reasons. But the Government did not itself build or own the ships. It imitated the policy of all the maritime nations of Europe and offered mail subsidies to American companies, which would build and operate an American steam marine. Private capital promptly supplied the Collins and Mills lines to Europe. The ships had no superiors in the world, and they enabled this country to retain the bulk of the swift mail, passenger and freight commerce of this country, until Congress for political reasons repealed the subsidies. Should the laws give proper encouragement to American shipping once more, then private capital would see to it at once that the fleet of steamers, which is being operated by International Mercantile Marine, would have an abundance of company in the ocean trade. Every sea on this planet would be covered with swift and handsome vessels, flying the American flag.

March 1, 1913, President Taft signed a bill, which thereupon became law, for physical valuation of the railroads, telephone and telegraph lines of the United States. One of the motives which led to this enactment was a desire to obtain authoritative data, from which to judge whether or not American railroads and electric lines are overcapitalized. But there was also the farther desire on the part of many to ascertain the cost to the Government of the ownership of these utilities. While conscious of the folly of an unnecessary investigation, which is expected to cost $50,000,000 and consume five years of time, the railroads, telephone and telegraph companies have welcomed it for the sake of the education of the American people. The investigation is now in progress. It has been completed in the case of one railroad, the Lehigh Valley.

Omitting all coal lands and collieries, the engineers find that the Lehigh Valley property is worth $324,478,300, while total capitalization amounts only to $136,375,600. Should this percentage of value and capital hold good, on average, throughout the United States, it would cost the Government to buy the lines, if actual value is to be paid for the properties, 2¾ times the railroad capital of the country, or not less than about 50 billions of dollars. This staggering expense would be paid for presumably in United States bonds, bearing 3½ to 4 per cent interest, thus imposing an annual tax of 1¾ to 2 billion dollars upon the people. Net corporate income of the railroads has, in recent years, run between $300,000,000 and $470,000,000 a year, according to the activity of trade. Therefore, the taxation involved in Government Ownership of the railroads of the United States would amount to three or four times as much as the present net income of the companies. In other words, it would be compulsory to treble or quadruple the freight and passenger rates of the United States to enable the Government to operate the railroads without loss. This is a burden, to which the American people would not submit for a moment.

Even if the Government should succeed in taking possession of the railroads by buying their stocks and bonds at the present depressed market price of some of them, the expense would be more than 20 billion dollars; and taxation on that account would average more than twice the net income of the roads. Again, it would be necessary to increase freight and passenger rates.

The same general fact is true of the telephone and telegraph lines. The properties are worth more than the united capital of the companies. To operate them as Government Owned utilities would increase the expense to the public heavily.

In another respect, Government Ownership of these great utilities would prove so disastrous, that it is incredible how any man of intelligence could consider the insolent proposition for a moment. The watchword in private enterprise of every description in this country, in factories, railroads, telephone systems, telegraph offices, mercantile and all other business establishments, is efficiency in the management and efficiency in the service rendered. It is almost invidious to mention any one of our modern great corporations as typical of all in this respect; but the business world of the United States would probably select the Bell Telephone system, now concentrated in the ownership of the American Telephone & Telegraph Company, and managed by that most competent of men, Theodore N. Vail, backed by able associates, as, par excellence, the highest type of efficiency in management and service rendered in the United States. In France, where the Government has a complete monopoly of the telephone, it often requires from one to four hours to secure a long distance connection with another city. In the United States, 4 minutes is seldom necessary. In many countries, where the telephone is owned and operated by the Government, the offices are not open all night, or indeed all day for that matter. New installations consume 4 weeks abroad, compared with 4 days here. In all countries, where there is Government Ownership of the telephone, delay, confusion, indifference and abominable mismanagement prevail to a degree that is absolutely intolerable to an American, travelling abroad, accustomed as he is to the swift, satisfactory and competent service supplied by American Telephone and Telegraph. In all of those countries, official investigations have repeatedly revealed the fact that initiative and efficiency are sacrificed, at once, by Government Ownership; and that a service managed by public officials rapidly deteriorates, falls into a hopeless muddle, and is impossible of improvement. This is the official record. The public, in foreign lands, endure these troubles because of a supposed military necessity.

Identical facts are the record of Government Ownership of railroads abroad. It is scarcely necessary to enter into details. The facts are beyond dispute. Official committees admit them. Quick, cheap and efficient service is the rule in the United States. Slow, crude, inefficient and expensive service is the rule under Government Ownership abroad.

Not only would Government Ownership in America burden the country with a staggering initial expense and vastly increased taxation afterward, but no public benefit would be derived from it. It has been proved impossible by actual experience to compel the officials of public railroad, telegraph and telephone lines to exercise economy in administration, to pay respectful and prompt attention to patrons, to initiate improvements in the service, and to coördinate their efforts for the public good. Efficiency, speed in execution, and untiring devotion to successful financial management are the last qualities to be expected from the clerks and employés of Government Owned public utilities. No opportunity for graft is neglected.

Should Government Ownership prevail in the United States, the manner and spirit in which the national administration would approach the subject would be of vital interest to all owners of securities. The Constitution provides: "nor shall private property be taken for public use without just compensation." What would constitute just compensation for railroad, telegraph and telephone lines? What the properties are actually worth, on an official valuation? What the market value of the securities is, at the time of condemnation of the properties? If the latter idea is to prevail, then it is within the power of Government, by drastic regulation and interference with rates, so to depress the market value of securities, to the financial injury of its own citizens, as to obtain possession of the properties at a figure far below their intrinsic value. Witness the depressing effect on railroad, express, telephone and other securities during the past ten years of public regulation! Such a policy would practically amount to confiscation. Would the people of this country subscribe for an enormous bond issue, in order to pay cash for the properties, under such circumstances? The situation is such that both the owners of securities, the patrons of all great public utilities and the public at large, will consult their own interest by overthrowing any political party, which seriously aims at Government Ownership in any form.

IX

PROSPERITY, CRISES AND DEPRESSION

A REVIEW OF CRISES AND BOOMS IN THE UNITED STATES, THE FORCES OPERATIVE IN EACH CASE, AND THE RESPONSE OF THE STOCK MARKET THERETO

To make money in security investments, it is essential to know approximately, if not precisely, when to buy the stocks and bonds of sound and solvent corporations and governments, and when to sell them. An attempt will be made in this book to codify the rules, which should govern both buying and selling.

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 those conclusions 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.

The broadest and most comprehensive view of the subject is afforded by a study of Cycles, which topic has been discussed in a preceding chapter. The study of Fundamental Economic Factors explains the causes, which operate to bring to pass the Cycles. An intimate relation exists between the market values of stocks and bonds and the prevalence of good or bad times; and it will greatly assist investors to attain a thorough knowledge of the times, when successful investors buy and sell, to review rapidly the periods of Prosperity and Depression in the United States and the incidents of each one.

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, partly in consequence of the tariff acts of May 2, 1792, and June 7, 1794, which levied higher duties on foreign goods. 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, August 24, 1814, and President Madison took refuge in a Virginia forest in a heavy rain, a panic was the quick result. In Baltimore, Philadelphia and New York, the banks suspended specie payments, August 26 and 31 and September 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 hardship, owing to lack of protection under the new and lower tariff law of April 27, 1816. 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 September 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 May 22, 1824, inspired fresh animation in home industry. Imports were cut down, exports were larger, and, in fact, during the six years, ending September 30, 1825, they nearly balanced, excess of imports being only a trifle more than $30,000,000. Money was in ample supply.

Manufacturing and domestic trade expanded. Public works were built on an extensive scale. Labor found good employment. The new life in every department of affairs led easily and in the usual way to overextension and 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. The tariff laws were a subject of unending controversy in Congress in this period. The South did not want protection to industry; the North did. May 19, 1828, a new tariff law revised the schedule of duties, raising some and lowering others. On the whole, the effect of this law was neutral, although the controversy over it had been disturbing. General Jackson was in this period 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 a long dispute in Congress and 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 theretofore 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 were promoted by the gradual lowering of duties by the Clay compromise tariff and 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 venture 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 7¼ per cent of the loans.

A great fire in New York, December 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. January 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. 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 protective tariff of August 30, 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 in the business world.

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, July 30, 1846, the famous Walker tariff for revenue only, in which enactment all duties on foreign goods were reduced to an ad valorem basis. 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, especially since the new tariff permitted enormous undervaluation of imports. 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. American sailing ships enjoyed, at that time, a wonderful prosperity. They had been gradually driving foreign bottoms out of the carrying trade; and the rush to California proved an immense stimulation of this interest, because the trade from the East to the West coast was closed against foreigners, as being of the nature of coasting trade. Many voyages were made to California, in which a single trip paid the whole cost of the vessel. 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, August 13, 1851, as a result of a break in Erie from $90 a share to $68⅜. 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 during the rush to California, and the finest clippers in the world had been built for the trade to California and Europe. 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. December 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. August 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, but 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 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.

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 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 dissensions in the United States, 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 business conditions, when this situation was reversed by the difficulty of making collections in the South which impaired the credit of many Northern merchants. President Lincoln was elected in November, 1860, as a result of the splitting up of the Democratic vote among three Democratic candidates, and the situation then became acute. Stocks fell between $7 and $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, November 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 genuinely 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, December 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, while 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. Except in the case of Reading, those prices have never been seen since in the fifty 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 trading stocks, it 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, and 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 \$82¾ 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. After 1864, the broad trend of the stock market was downward for 13 years, namely until 1877. Short lived bull markets prevailed from time to time, but every new decline carried the level of market values lower and lower until 1877. Trade and manufacturing also enjoyed recoveries and booms from time to time, but these also were not of long duration.

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. 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 war demand for 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 a turning point here. After a rally, and one more reaction in the Spring of 1867, the trouble was ended for the time being. 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. Every burst of business activity, however, 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. Production of the five principal grain crops in the United States had risen from an aggregate of 1,308,370,000 bushels in 1867 to 1,656,198,-000 bushels in 1872; cotton, 2,233,000 bales in 1866 and 3,874,000 bales in 1872. 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, November 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 5/8 per cent a day and 2½ 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 $68½ in October to $230 in November, but the corner failed almost at the moment of success and the stock broke to $81½ in December. A semi-panic ensued, with many failures. For a short time, the banks stopped the issue of weekly statements of their condition.

Changes in the laws levying duties on foreign goods played a part in the depressing influences of those times. July 14, 1870, the Schenck tariff was enacted, as a first step toward reducing the high duties of the war period. The changes were not particularly important but they were all in the direction of lowered duties. June 6, 1872, the Dawes tariff became a law, enacted in response to violent clamor from the agricultural sections of the Union against high duties. A straight 10 per cent reduction was ordered in all the principal schedules of the law. This act was a shock to the manufacturing world and helped bring on the panic of 1873.

Early in 1873, money worked close again. Call loans could not at times be made for less than 7 per cent, with ¾ per cent a day commission added. Bankers charged ¾ 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 ¼ 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.

March 3, 1875, the horizontal 10 per cent reduction in the tariff law of three years before was repealed. This repeal inspired fresh courage in manufacturers and exerted a most happy effect upon business.

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 business was unmistakably downward in this period, and a strong bear party came into existence in Wall Street 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 sixteen 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 1860 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 then 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. Aggregate production of the five leading grain crops was 2,703,575,000 bushels in 1880, and only 2,056,543,000 bushels 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, framed by the advocates of protection but in substance a compromise with the friends of revenue duties, 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 General 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 setback 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.

William 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 were 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. A noteworthy incident on February 2, 1887, was enactment of a law "to regulate commerce," creating the Inter-State Commerce Commission and forbidding rebates, preferences and pools among the railroads. The act was not harmful at the time, but was made more drastic by amendments in subsequent years.

The bull market worked gradually upward after 1885. In 1887, a number of sensational movements in stocks enlivened Wall Street; and August 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 setbacks, 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. The since famous Sherman Law or anti-trust act entitled "an act to protect trade and commerce against unlawful restraints and monopolies" was signed by the President, July 2, 1890. While lightly regarded for several years, this law has since become an instrumentality of great disturbance in the business world. 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.

One influence, which later proved extremely favorable to the business world, came into play at this time, although its beneficial effects were entirely eclipsed for the moment by the predominance of unfavorable factors. This was the enactment, after a prolonged controversy, of the McKinley protective tariff law of October 1, 1890.

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 setback, 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 indicated by nearly all the customary factors. The times had been good. The McKinley protective tariff 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 in our history. 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 losses, ruin and distress in the country at large were, however, heartrending and almost 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. May the United States never again pass through such an awful experience as was furnished by the years from 1893 to 1896!

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 business man escaped 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. Production of the five leading grain crops had been declining for three years, falling from an aggregate of 3,528,919,000 bushels in 1891 to 2,423,201,000 bushels in 1894. 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 on August 27, 1894, and the friends of home industry were despondent. Sentiment was farther depressed in the Summer of 1894 by the strike at Pullman, Ill., and the crimes and outrages perpetrated by the unions and the march of Coxey'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 of 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 not required for export was taken out. 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. The food crops of 1895 were record breakers. 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 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 marvelous 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. The grain and cotton crops were of handsome size. 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. Million to 2,000,000 share days were common; 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. So tremendous was the physical labor of handling such a mass of speculative business, that, on May 11, 1901, the New York Stock Exchange was closed for one day to enable brokers to dispose of the arrears of work. Fortunes were made by every trader in the Spring of 1901. 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 that year set back prices for a time and called out from Thomas W. Lawson, 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 setback to the market. Mr. Flower's syndicate had boomed Brooklyn Rapid Transit to the historic high record of 137 and People's Gas to 129½. His death brought about a fall in Brooklyn Rapid Transit of $76 a share by December and $28½ a share in People's Gas. Numerous speculators incurred losses from that smash, from which they did not recover for years.

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 remarkable shortage in the corn crop (2,105,102,000 bushels in 1900 and 1,522,520,000 bushels 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 nearly a parallel to the year of 1864. A multitude 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.

At that time, financial interests of the first magnitude were not in entire accord. Harriman was fighting Morgan and Hill. The trouble was intensified by President Roosevelt's active hostility to the "trusts," his suit to wrest Northern Pacific from E. H. Harriman's control, and his efforts to induce Congress to pass restrictive railroad legislation. Farther, the Anthracite Strike Commission had made its award, giving the miners a substantial victory; and thereupon a wave of labor unrest had swept over the whole country, attended with aggressive demands from a great variety of labor unions and many exasperating strikes, among them one in the building trades in New York, and one among the Western Miners' Federation.

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. February 19, 1903, the Elkins act became a law, instituting severe penalties for rebates by railroads. 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 of 1904. Enforced closing of many mills and shops was reported. Retrenchment was the order of the day. Thousands of workmen were discharged from 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 2½ to 3½ for time money. The great abundance of available cash led, as always, to a bull market.

PANIC OF 1907

Top of the boom was touched January 24, 1906. Stocks then declined. An incident of this period, which may be mentioned in passing, was enactment of the so-called Hepburn law by Congress June 29, 1906, which contained the "commodities clause" forbidding railroads to transport coal, mined by themselves at their own mines. While not contributing to the causes, which precipitated the Panic of 1907, operation of the law afterwards forced the railroads of the country to organize coal companies to carry on the actual process of mining, the coal being transported for them as for other patrons of the lines.

Business was in a high state of prosperity in all parts of the country in 1906. Crops had been enormous, breaking all records. Every one was making money. The railroads were crowded with traffic and the number and length of freight trains was a marvel. Almost all the trunk lines and some others voted larger dividends, Union Pacific going on a 10 per cent basis. Wage advances were granted by the railroads aggregating about $100,000,000 and an advance equal in amount was conceded by the industries. Over $2,000,000,000 of charters of the million-dollar class were taken out, and over $1,000,000,000 of new securities were authorized. The general public had lost all sense of perspective and had been carried away from the moorings of common sense and experience. Men there were who actually predicted that the good times had come to stay forever and that there would not be another panic and period of depression for a century to come. The old, old story of the conditions forerunning a crisis was repeated in all other particulars. Bank reserves in New York fell to a low ebb. Interest rates rose, and the enormous excess of loans over deposits alone foreshadowed the turn in the tide. In spite of rallies, stocks ended the year lower than at the start. In 1907, after a feeble January rally, and especially after Congress had adjourned without relieving the financial stringency, liquidation set in. In March, a panic broke out in New York; and stocks and bonds fell at times furiously, never stopping until November 21st. The slaughter of prices was terrific. The advance of the previous six years was wiped out; and the panic brought to light the usual exposures of rottenness in various financial quarters. The fall in the prices of bonds was not the least striking feature of the panic of 1907.

In October and November, more than 40 banks and trust companies in New York and elsewhere closed their doors. Fifty-one Clearing Houses in American cities issued Clearing House certificates, New York alone issuing $101,185,000. (Later, in 1914, only 12 Clearing Houses resorted to this panic expedient.) Call money rose to 125 per cent in New York. So completely were the general public frightened by the bank failures and the scarcity of currency, that not only did thousands of men refrain from using their bank balances at that time for the purchase of sound securities at the remarkably low prices then prevailing, but they collected all the ready cash which they could extort from reluctant financial institutions and stowed it away in safe deposit boxes, in order to make sure of money enough to pay current expenses for a year ahead. The enormous private hoarding of cash contributed to the troubles of that historic year. In several Western States, legal holidays were proclaimed for many days in succession, to save the banks, while the Stock Exchanges in Pittsburgh and New Orleans were closed for more than a month. England raised its bank rate to 7 per cent, the highest since 1873.

From the high prices of 1906, the average decline in active stocks was $81 a share. Union Pacific fell 95⅜; Reading, 93½; Delaware & Hudson, 111¾; St. Paul, 106⅛; Chicago & Northwestern, 114; Northern Pacific, 132; American Smelting, 115¾; Great Northern, preferred, ex-Ore certificates, 240½; and Westinghouse Electric & Manufacturing, 144.

The panic of 1907 was due to monetary and financial considerations and should not have been a surprise to the business world. Its approach was unmistakable in December, 1906. The panic was, in fact, predicted by Jacob H. Schiff, Frank A. Vanderlip and others, and by the author of this book in correspondence with the authorities at Washington.

The troubles of 1907 were intensified by a wave of political hostility to corporations, which had swept the country from end to end. Not only had the national administration begun war upon

Standard Oil and initiated a general campaign of prosecution of the "trusts," inspired by enmity toward "certain malefactors of great wealth," but President Roosevelt's example had led the States to enter upon the enactment of 2-cents-a-mile laws and other oppressive restrictions upon the railroads. The air was full of antagonism toward the interests, which had just given the whole country ten years of unexampled prosperity. States and the nation vied with each other in passing laws, ostensibly for control of corporations but nearly all having the effect of reducing their net incomes. An extra expense of $200,000,000 a year was saddled upon the railroads by these laws. President Roosevelt's denunciations of rich men, and of Federal Courts which had not decided Government suits as he wished them to, also proved disturbing. Farther, an active campaign was begun against "trusts" with a view to force their dismemberment into their original component parts. November 15, 1906, the Government filed a suit under the Sherman law for dissolution of the Standard Oil Company, as a monopoly in restraint of trade, a proceeding which dragged along in the courts for nearly five years before it was decided. July 11, 1907, a similar dissolution suit was brought against American Tobacco. Other prosecutions were ordered. August 3, 1907, Judge Landis of Chicago imposed upon Standard Oil of Indiana the unheard-of fine of $29,240,000 for accepting rebates. While this fine was overruled later, and none at all was collected, the shock to public confidence was great, and the worst of the panic of 1907 occurred thereafter.

A serious crop shortage accentuated the troubles of the latter part of 1907. The five principal grain crops aggregated only 4,166,013,000 bushels in 1907 against 4,839,871,000 bushels in 1906, while cotton fell from 13,305,265 bales in 1906 to 11,325,882 bales in 1907.

General trade in the United States did not feel the panic, until the financial storm was over. In October, 1907, earnings of railroads and industries were the largest in history. Thereafter, recession in trade and traffic was rapid. By January, 1908, railroad earnings had declined almost one half, and trade had diminished materially. Mills and factories were closed in large numbers. Wages were reduced in many trades. And, in the first half of 1908, there were reductions or suspensions of dividends by many railroads and industrial corporations, while a number of small railroads went into bankruptcy.

Recession in trade came to an end in the Spring of 1908. So rapid was the recuperation which followed, that it proved the marvel of the whole world. The protective duties of the Dingley tariff law, then in operation, provided a powerful stimulus to manufacturing. Scant attention was paid to a decision by the United States Circuit Court, November 7, 1908, ordering the dissolution of American Tobacco. The election of President Taft in November, 1908, and his declaration that "every man who is obeying the law may go ahead with all the energy in his possession," greatly aided the return of better times. May 3, 1909, the United States Supreme Court rendered a decision, which gave great satisfaction to financial interests. Under the "commodities clause" of the Hepburn law, the Attorney General of the United States had brought a suit in 1908 against all the anthracite roads of the Middle States to compel them to dispose of their coal mines. The roads won this suit in the lower courts, September 10, 1908, but the Government appealed. The United States Supreme Court upheld the law; but declared that the sole object of the law was to forbid carriers to own the coal, transported by them, and the court simply required that the mines be transferred to the ownership of specially organized companies which should thereafter own and sell the coal. The court's verdict enabled the railroads interested to sell the mines to their own stockholders, which is practically what it amounted to. Effect upon the shares of the anthracite coal roads was most happy. The revival of trade ran along until the latter part of 1909, by which time railroad and industrial earnings had again broken all previous records and the whole country was in a state of great prosperity. Up to August 12, 1909, leading stocks had recovered an average of $67 a share. Union Pacific had risen 119; Southern Pacific, 76; Reading, 103; U. S. Steel, 73.

Financial powers of the first magnitude had prepared to carry the stock market considerably higher. An end was put to the bull campaign, however, by the fatal illness of E. H. Harriman, in August, 1909, and by his death September 9th. Many plans of importance were then slowly and reluctantly, but compulsorily, abandoned, because Mr. Harriman's coöperation had been necessary. Liquidation took the place of speculation for a farther rise. November 20, 1909, the U. S. Court at St. Louis ordered the dissolution of Standard Oil; and after the 1st of January, 1910, the stock market turned downward.

REACTION OF 1910

THE troubles of the year of 1910 were again due to causes political and financial. Duties on many classes of foreign goods were reduced by the Payne tariff law of August 5, 1909, promoting imports, while the high price of cotton and grain reduced exports. The balance of foreign trade in our favor, $666,431,554 in the fiscal year of 1908, was reduced to $187,164,732 in the fiscal year of 1910. In the latter year, more than $75,000,000 of gold was exported, to the detriment of our banking resources. Cost of living was unusually high, and there was a popular craze for buying automobiles. Millions of money were withheld from investment in securities, and other securities were sold to obtain ready cash.

But the Federal campaign against "trusts" was chief among the influences which alarmed legitimate business interests in 1910 and led to a long, slow, persistent decline in stocks and a material recession in trade. Numerous prosecutions were brought by the Attorney General. A new railroad law was enacted June 18, 1910, increasing the powers of the Commerce Commission and placing freight rates entirely under its control. A corporation tax law was enacted. When the railroads proposed, in May, 1910, to increase freight rates, to offset higher wages recently granted, the Attorney General promptly brought an injunction suit at midnight of May 31st and stopped the proceeding. Delay took place in a final decision of the American Tobacco and Standard Oil dissolution cases, which had been appealed to the U. S. Supreme Court, and the disposition of which was impatiently awaited by the financial world, in order that it might be known what corporations are legal under the Sherman anti-trust law. Political clamor also arose in favor of farther drastic revision of the tariff. Not to mention other incidents of 1910, in harmony with those mentioned, suffice it to say that political hostility toward corporations and toward the protective tariff completely upset the business world, and brought on a series of declines in stocks, as well as a reaction in trade.

Lowest prices for stocks were registered in July, 1910, when active denominations had fallen an average of $40 a share.

1910 TO 1915

THE period from July, 1910, to the end of 1915 was attended, first, by a strong recovery in the stock market, lasting until July, 1911; a speculative fright and reaction in stocks in the Fall of 1911; a long slow bull market, which ran on until October, 1912; a slow, irregular decline in stocks, which culminated in a panic in July, 1914; and a wonderful recovery in both business and stocks (interspersed with reactions in the latter), which had not yet culminated in January, 1916, so far as standard investment shares and even some of the war issues were concerned.

The dominating influence of 1910 and 1911 was the exasperating persecution of corporations by the national administration under the Sherman law and other anti-trust statutes, and the persistent hostility of the Commerce Commission toward railroads.

November 29, 1910, the Government filed a suit for dissolution of the American Sugar Refining Company and instituted criminal proceedings against various directors. The criminal suits have since been beaten, but in 1916 the dissolution suit is yet pending.

The railroads of the country, oppressed by the constant petty reductions of rates by the Commerce Commission, had made a powerful appeal to that Commission in 1910 for permission to initiate a general advance in freight rates. The petition had been under argument for nearly a year. February 23, 1911, the Commission refused the advance in rates, to the great discouragement of the whole financial world.

May 15, 1911, the fierce Government prosecution of Standard Oil, as a monopoly in restraint of trade, was brought to an end by a decree of the Supreme Court of the United States, ordering dissolution of the company. It was in that decision that the Court laid down "the rule of reason," to govern trust cases in the future. May 29, 1911, the same tribunal ordered the dissolution of American Tobacco. The financial world had, however, accepted the dissolutions as probable and the verdicts had no adverse effects on stocks or business, whereas the fact that "the rule of reason" was to be applied in the future was accepted with satisfaction.

But in the Fall of 1911, it became known that the Government was preparing to bring a dissolution suit against the great United States Steel Corporation, a concern which had proved the greatest boon to the iron and steel trade in the history of the country through its refusal to advance prices excessively in periods of business prosperity and its refusal to join with independent steel makers on various occasions in a conspiracy to extort high prices. The shares of the U. S. Steel Corporation had become extremely popular and were widely held as investments by the people of the United States. Alarm over a probable dissolution suit led to heavy selling of Steel shares in August and September, 1911. The whole market succumbed sympathetically and there was a reaction into October, averaging $26 a share in six leading and significant stocks. The dissolution suit was actually filed in the courts, October 26, 1911. The worst being then known, bear speculators covered their short commitments, and a bull market started, lasting until well into 1912.

During 1912, business revived in the United States appreciably, assisted by record breaking crops of grain. Production of the five leading grains amounted to 5,532,838,000 bushels, compared with 4,268,483,000 bushels the year before. There was sufficient foundation in 1912, therefore, for the bull market of that year.

Outbreak of war in the Balkans, October 8, 1912, brought the bull movement to a premature close. Several countries in Europe feared, and two or three hoped, that Balkan troubles would lead to a general war. Immediately banks, investment companies, and individuals in Europe began to prepare for possibilities by liquidating their security investments, especially American bonds and stocks, whereupon a long slow decline in our markets set in, which culminated finally in 1914, upon the declaration of war by Austria on Serbia, July 28th, an incident which precipitated the long-dreaded and long-expected general war in Europe. The financial smash in the United States was most severe. The South was prostrated by sudden curtailment of exports of cotton.

Meanwhile, other incidents had occurred, upsetting to business and stocks. In the November elections of 1912, owing to a split in the protective tariff party in the United States, Woodrow Wilson, a Southern man and an advocate of low duties, was elected President of the United States. With him was elected a Congress in sympathy with his political principles; and the Underwood tariff, reducing duties and reintroducing ad valorem duties in place of specific, became the law of the land, October 3, 1913. This law proved immediately depressing to general business throughout the United States. Two other notable dissolution suits were brought in 1913, one on March 2d against Corn Products Refining, and one on November 29th against the American Can Company, while various other trust prosecutions were brought against railroads.

In the midst of the war panic of 1914, the New York Stock Exchange closed its doors after July 30th, for the second time on record, the previous occasion being an incident of the panic of 1873. The Exchange did not reopen for business for several months. Practically all the other stock exchanges of the United States imitated New York's example promptly. The cotton exchanges were also closed. Two months later, beginning in September, the local exchanges throughout the country began to resume one after another. November 12th, the Curb market in New York resumed trading in unlisted securities. The cotton exchanges in New York and New Orleans reopened November 16th. The New York Stock Exchange opened its doors for open trading in bonds only, November 28th. December 10th, the Boston Stock Exchange resumed. On December 12, 1914, after a suspension of 111 business days, the New York Stock Exchange resumed open trading in stocks.

During the long period of suspension of the Stock Exchange, the authorities in New York and other cities established minimum prices for all leading stocks and bonds, and permitted the private liquidation of speculative accounts at not less than the minimum prices established. The object was to relieve the pressure upon bank loans. Customers of the commission houses were influenced, as far as possible, either to pay in full for stocks which were being carried on margins, or to take their losses through the sale of their securities. All trades and sales by brokers in behalf of their customers were required to be submitted to the stock exchanges for approval; and these trades were accomplished privately through the medium of the stock exchange clearing houses. By December, liquidation had been practically accomplished and the exchanges were ready to resume business openly.

A curious episode of this remarkable period was the sudden creation of an open market for stocks and bonds, in New York, by the "put and call" brokers, who gathered in the open air in the roadway and sidewalks of New Street, and there bought and sold securities for cash. In this novel and transitory market, which disappeared the moment the regular exchanges opened their doors, stocks were bought and sold at first at prices lower than the minimum fixed by the stock exchanges, but later they rallied above the minimum prices, and when the stock exchanges reopened there was considerable stability in the market.

The financial difficulties of 1914 in the United States were intensified by the disturbance of our foreign trade, April to August, and by the enormous European liquidation of American securities. For three years previously, the monthly balance of trade had run heavily in favor of the United States, month by month and year by year, amounting to $560,000,000 in the year of 1911; $581,000,000 in 1912; and $691,400,000 in 1913. But in the four months of April–July, 1914, the balance of trade ran against the United States to the amount of $29,000,000. This fact, coupled with shipment of vast quantities of stocks and bonds to the United States for sale, led to an almost unprecedented volume of gold exports, amounting to $165,200,000 net in 1914, and left us owing Europe $150,000,000 on current account. As a result, the banks of New York city, which bore the brunt of the shock, were so grievously burdened that they were obliged to suspend the issue of the regular weekly bank statements, from August 1st until November 21st. Meager totals were given out and that was all. The New York Clearing House for the tenth time on record was obliged to issue clearing house certificates to the amount of $124,695,000. In twelve other cities, clearing house certificates were also resorted to in an aggregate amount of $87,083,000.

The wonderful stock market boom of 1915 has never been surpassed in the United States for the high prices attained by certain shares. The only parallels on record are furnished by the years 1864, 1902, 1906 and 1909. The boom was based on a substantial revival of business, originating, as such revivals always do, with the iron and steel industry, and with the concession of higher freight rates to the railroads by the Commerce Commission, beginning in 1914. The war in Europe brought to this country from England, France, Russia and Italy orders for nearly two billion dollars' worth of grain, meat, clothing, barbed wire, firearms, powder, shells, motor cars and other munitions of war. Within a few months' time, all industrial corporations which were fitted to manufacture the specific articles required by the armies abroad, were overwhelmed with a volume of business, which ensured them work at full capacity and unusual profits for one and two years ahead. Copper metal, a prime material for the manufacture of fixed ammunition, and alcohol and sulphuric acid, used in the manufacture of explosives, all came into strong demand. Gasoline and benzol were also in demand and were extensively bought in this country. The concerns engaged in production of these different articles were assured of immense profits, ranging from 30 to 100 per cent on their common shares, for a year or two ahead, and these shares rose enormously in market value. Here are some of the striking instances:

	Low price of 1915	High price of 1915
American Can	25	68½
American Coal Products	82	170½
Baldwin Locomotive	26⅝	154½
Bethlehem Steel	46¼	600
Canadian Car & Foundry	76	119
Carbon Steel	41	134
Crucible Steel	18¼	109⅞
Continental Can	40¼	127
Driggs-Seabury (ordnance) . . .	66¾	190
Electric Boat (submarines) . . .	18¼	109⅞
General Motors	82	558
Lackawanna Steel	28	94¾
Maxwell Motor	15¼	92
Midvale Steel	60	97¼
Standard Oil of New Jersey . . .	385	570
Studebaker (motor cars and wagons)	35¾	195
U. S. Industrial Alcohol	15	131¾
United States Steel	38	89½
Westinghouse Electric	32	74⅞
Willys-Overland (motor cars) . .	87	268

Some of the foregoing high prices have since been exceeded.

Railroad shares enjoyed a considerable rise but they were subjected to the retarding effect of continual sales by European investors. No boom in these issues was looked for, or could have been managed, until the end of the war in Europe should have reduced the volume of foreign sales and perhaps initiated new European buying.

A peremptory call for wheat and flour to feed the warring armies abroad came at a time when the farmers of the United States were marketing the greatest crop then ever raised, that of 1914, amounting to 891,107,000 bushels. A large production should, by economic law, bring low prices. But enormous exports of wheat in 1915 caused May wheat to rise to $1.67 a bushel and July wheat to $1.43⅝. The size of the crop and the unusual prices at which it was sold lent great support to a revival of business in the United States and the bull market in stocks in 1915. An even greater crop was harvested in 1915 and is finding a ready sale abroad at higher prices than for many years previously.

Foreign trade supplied another substantial backing for the prosperity of 1915. Excess of exports over imports exceeded $1,700,000,000, a record never before made, and this in spite of heavily reduced exports of cotton, heretofore the largest individual moneymaker in our foreign trade.

The country enters 1916 yet burdened with a revenue tariff, whose ill effects have been largely postponed until after the end of the war in Europe, but with public sentiment more favorable to big business and the railroads, and with every prospect of a year or two more of good times.

It is to be noted, as a distinct and logical phenomenon, that a decline in stocks antedates an actual turn downward 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.

A circumstance of momentous interest is the fact, that the price of good securities steadily moved higher, on the average, after 1877, in spite of all the trials to which they had been subjected by panics and reactions, until 1909. It is true that they declined in every serious crisis; but, without a single exception in the thirty-two years, the average of prices did not fall as low as in the last preceding period of depression, whereas they tended in each new period of prosperity to go higher than ever before. From 1909 until 1915, the broad trend of the stock and bond markets has been downward in consequence of public hostility toward corporations and a reversal of the protective tariff policy of the United States.

X

COURSE OF THE STOCK MARKET SINCE 1860

BULL AND BEAR MARKETS, PERIODS OF PROSPERITY AND DEPRESSION, SHOWN GRAPHICALLY.—A DIAGRAM OF THE FLUCTUATIONS IN TWENTY SELECTED RAILROAD STOCKS

It is desirable that the students of economics and finance shall know the manner in which corporate shares have responded to the varying influences of the times for a period of years. This is shown by a diagram, representing the course of the average of actual prices of 20 railroad stocks since 1860, on the following page.

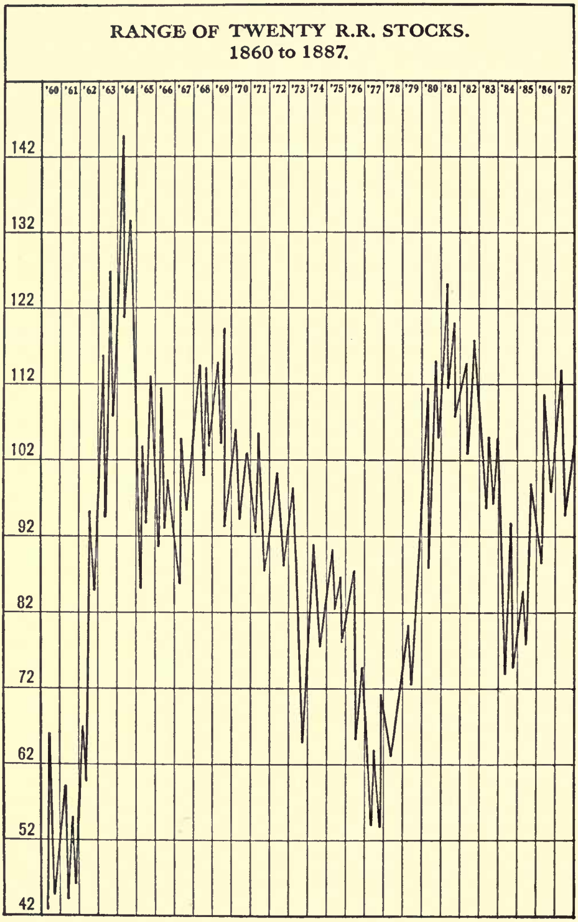
In 1860, there were only 17 railroad shares whose quotations are available for this chart. They were:

Central of New Jersey,	Erie,
Chic., Burlington & Quincy,	Hudson River,
Chicago & Rock Island,	Harlem,
Cleveland & Pittsburgh,	Illinois Central,
Cleveland & Toledo,	Michigan Central,
Cleveland, Columbus & Cincinnati,	Michigan Southern,
Delaware & Hudson,	Milwaukee & Prairie du Chien,
Delaware & Lackawanna,	N. Y. Central,

Reading.

In 1863, there were added to the list three more, namely, Chicago & Alton; Chicago & Northwestern; and Pittsburgh, Fort Wayne & Chicago, making 20 in all.

In the tabulation of statistics for the sake of this chart, it became necessary to make changes in the list of 20 stocks from time to time. When N. Y. Central was combined with Hudson River in 1870, it became necessary to drop Hudson River and select in lieu thereof another railroad stock as nearly as possible of the same class and market value. When Chicago & Alton was dropped from the list of the New York Stock Exchange, temporarily, in 1899, another substitution was necessary.


RANGE OF TWENTY R.R. STOCKS.
1860 to 1887.
'60 '61 '62 '63 '64 '65 '66 '67 '68 '69 '70 '71 '72 '73 '74 '75 '76 '77 '78 '79 '80 '81 '82 '83 '84 '85 '86 '87
142
132
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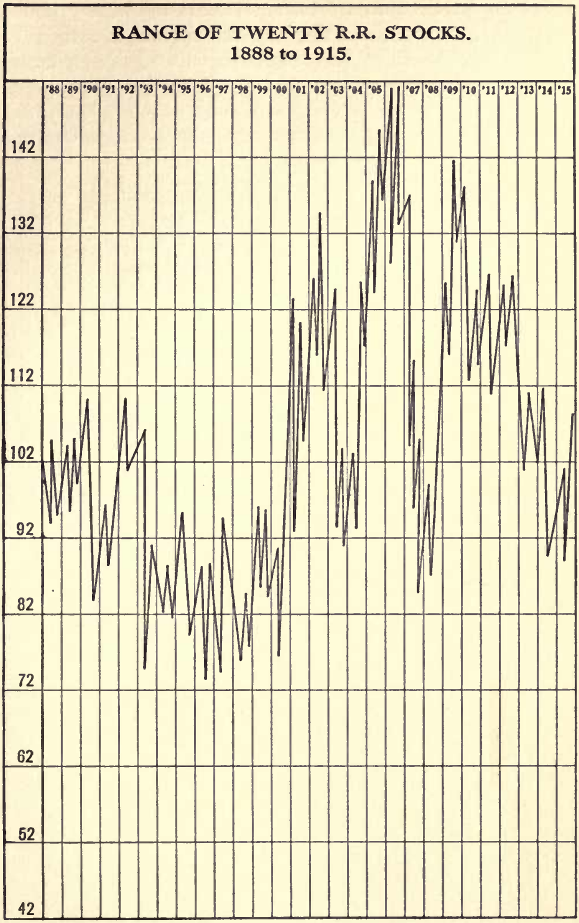
RANGE OF TWENTY R.R. STOCKS.
1888 to 1915.
'88 '89 '90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '07 '08 '09 '10 '11 '12 '13 '14 '15
142
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Delaware, Lackawanna & Western became too high priced an issue in 1899 to serve a useful purpose and was exchanged for Lehigh Valley. Northern Pacific has been omitted entirely because it disappeared from the exchanges in 1901 for several years.

Other changes were made, one at a time. From 1900 to date, the chart shows the major swings of the following 20 railroad shares:

Atchison, Topeka & Santa Fe,
Baltimore & Ohio,
Chesapeake & Ohio,
Chicago, Milwaukee & St. Paul,
Chicago & Northwestern,
Delaware & Hudson,
Erie, 1st preferred,
Great Northern, preferred,
Illinois Central,
Lehigh Valley,
Louisville & Nashville,
Missouri, Kansas & Texas, preferred
New York Central,
New York, New Haven & Hartford,
Norfolk & Western,
Pennsylvania,
Reading,
Southern Railway, preferred,
Southern Pacific,
Union Pacific.

The foregoing 20 denominations are thoroughly representative of the whole body of railroad shares, because, with rare and infrequent exceptions, the whole stock market has always moved simultaneously in one direction, either up or down.

XI

INVESTMENT AND SPECULATION

A DEFINITION OF EACH.—THEIR POSSIBILITIES

ACCURATE thinking is promoted by scientific definitions. The old idea of Investment was the application of savings or surplus profits to the purchase of property, business or securities, yielding a fixed rate of income; the income being larger than a savings bank affords, or on a larger sum of money than the savings banks will accept on deposit; payment of the income being certain. Attention of the investor was always drawn to Income, the Rate, and Certainty of the Income. In the mind of the investor in securities, there was always this farther idea, that the bonds or stocks which he bought were to constitute the nucleus of his fortune or a permanent addition to his accumulated wealth.

Investors have discovered to their chagrin that Income and the Certainty of it can never be guaranteed except by real estate mortgages. The safest form of security investment is in a mortgage, on well located real estate, the mortgage being executed for not more than two-thirds of the value of the property. There is less speculative risk in mortgages than in most other forms of securities. On the other hand, there is no increment to capital. The income is fixed and definite. A man knows exactly what he is going to receive in the way of income. Both principal and interest are secure. When the mortgage is paid, the investor receives his entire principal, no more, no less. A man does not add to or lose his capital in a real estate mortgage, but his money is safe. With the generality of stocks and bonds, the case is different.

INVESTMENT

IN view of the whole financial history of the United States, it seems clear that the working definition of Investment, the real definition, so far as bonds or shares of stock are concerned, should be securities which provide:

1. Absolute safety of the principal invested, so that the security, when sold, shall yield at least the amount of the original capital. This ought now to be the first consideration in making an Investment, and is here given first place, accordingly.
2. An income, which for various reasons should be at least equal to the average rate of interest on 6 months bank loans, during a period of years, including at least one year of good times. This provision helps safeguard the principal.
3. Certainty of income, even in dull years.
4. Ready convertibility into cash, when the security is sold.

Unless those four fundamental objects are positively secured, then the securities purchased are not an Investment. They are essentially a Speculation, whether so intended or not, and no matter whether the purchaser intends to hold them for a long term of years, or for only a comparatively short period.

It follows, therefore, that no exchange of cash for securities is an Investment, a real Investment, a wise Investment, the only kind that a man ought to make, unless it takes place under such circumstances, and at such a price, that a subsequent advance in market value of the securities is practically assured. The propriety of making an Investment should always be considered from this point of view.

Now, of course, by a subsequent advance in value, an Investor is always able to add an increment to his original capital. This circumstance may seem to constitute every Investment a Speculation. But, in fact, it does not, except as one might say by accident. So far as that is concerned, an Investor is always entitled to a profit on his capital, as much so as a merchant, who expects his capital to be returned to him, after sale of his goods, with a profit added. But that is not the point here. When capital is put into securities, then, to be a good investment, the securities must at any rate always enable a man to reclaim his capital.

SPECULATION

Speculation in securities is (1) the purchase of bonds or shares of stock which the owner expects to hold for a comparatively short period, and which he expects to sell at an advance in price, or, (2) the sale of securities, with the express intention of repurchasing at a lower price. In Speculation, a man operates in part, as a rule, with borrowed capital, sometimes almost wholly so.

Investors become speculators, technically, to a certain extent, when they sell out their securities at the dizzy pinnacle of an extraordinary boom, like that engineered by Harriman and his Standard Oil and other associates in 1906, and at any other time when all the weather vanes of finance point rigidly to a coming business and financial panic. The Investor foresees the inevitable crash; and he sells in order to recover all his income producing securities at much lower prices, within the next year or so, and, as a matter of fact, he does so. Investors are extremely sensitive to any imputation that they are speculators; and their clearness of vision and the coolness and certainty, with which they proceed, relieve them from any suspicion of being speculators in the popular sense of the word. Nevertheless, the transaction referred to comes within the technical definition of a Speculation. Securities are sold for the sake of repurchase at a lower price. This is the essential nature of Speculation, an operation to take advantage of a coming change in prices.

Income from the securities traded in enters into the success of Speculation to some extent, because those who figure closely all possible sources of profit do not disregard it. But the majority of speculators pay little attention to income. The main object of a Speculation is, and its principal remuneration accrues from, a change in price. This is the whole meaning of the word.

The very nature of these definitions shows the reasonableness of the assertion, that Investment and Speculation are not far apart in their nature. They go hand in hand. Nevertheless, they are two perfectly separate and distinct things. They are similar, in that both are attended with more or less risk, and both are capable of adding to wealth. The risk is minimized, however, in the case of a proper Investment. In Speculation, the profits are greater. Where successful, as it may always be, Speculation is far more attractive in its results than Investment. Investment aims mainly at safety of capital and an income, together with what might be called a tradesman's profit on the goods when sold. Speculation sets its heart upon bonanza profits and if properly conducted makes them.

Now, with reference to Speculation, there are two radically different branches of the practice.

One of them is as well grounded, laudable and sound as Investment; ennobling to the mind; not detrimental to character or reputation; containing an almost negligible element of risk; practically certain to bring a rich reward in the accumulation of a competence; and indeed a most useful adjunct and guide in the management of a man's practical business affairs, because it is based upon an intelligent judgment of the trend of the times, that is to say on foresight. This is the purchase of securities, as certain critical opportunities present themselves, to be hereinafter more particularly described, in the expectation of substantial profits at a certain not distant period of time ahead; or, on the other hand, the sale of securities, at certain other critical periods, with a view to repurchase at a much lower range of prices. The man who engages in an operation of this so-called "long pull" character cannot be regarded as a speculator in any meretricious or disreputable sense, and his transaction should be regarded as a sound, sagacious and creditable business proceeding. Such an operation has great value to the man himself.

The author has a correspondent, who for five years never looked at a newspaper. He was too much occupied with the details of an engrossing business occupation. At times, his business was active and profitable; at others, depressed to the point where it barely met expenses. He never knew why it was so, in either case. Under instructions, he bought stocks early in 1908, before the big rise began. This wrought a great change in the man himself. He became at once interested in the world's doings; in legislation affecting railroads and corporations; in the tariff; in the crops and in all that affected earnings; matters to which he had never before paid the slightest attention. For the first time in his life, the daily newspaper became entertaining and instructive to him beyond expression. He himself became vigilant and attentive to the constant changes going on around him; and by reason of his broader knowledge and his new acquaintance with the forces which lead to prosperity or depression, he became much more competent in the management of his private business and in adapting it to the trend of the times. Speculation which produces results as beneficial as these, must be regarded as highly laudable, entirely without regard to the manner in which it promotes wealth.

The other branch of Speculation is less meritorious, because it partakes entirely of the nature of gambling. This is Speculation for petty turns in the prices of stocks, and on a narrow margin, operations being based on rumors and "tips" or on tape reading. In this line of effort, a very few persons of peculiar abilities excel; and they accumulate fortunes. But where one succeeds, hundreds fail. With the generality of petty speculators, their losses generally amount to as much as their profits; so that even at the best, they find Speculation unsatisfactory in its results. They never get ahead. It is this form of the practice which gives Speculation a bad name and rightfully injures the reputation and business standing of those who engage in it.

POSSIBILITIES

At 6 per cent compound interest, money doubles itself in about 12 years. In some parts of the United States, money can be loaned, year after year, at 6 per cent. Compound interest is the source of many fortunes in France and continental Europe, and of a few in this country.

Through application of surplus capital to purchase of sound securities, sales of the same at critical periods, and repurchase at others, money should increase through the medium of Investment at least 100-fold in 5 or 6 years. Opportunities for sale and repurchase occur, normally, once or twice every year. The large gains, possible in Investment, are not theoretical. They have been exemplified in the lives of thousands of prosperous men.

In legitimate Speculation, based on the considerations to be hereinafter set forth, money should increase from 50 to 100 per cent every year, and this too by trading in moderation on a margin of $40 to $50 a share. After the first ten or twelve years the rate of advance will be slower, but large, nevertheless. When a man's fortune is so large that, like Frank A. Munsey or Henry C. Frick, or the late E. H. Harriman, he can handle from 100,000 to 300,000 shares of stock, so large a block can neither be bought nor sold as advantageously, or as promptly, as a block of 1,000 shares. After the attainment of a considerable fortune, therefore, the rate of accumulation is not as rapid as previously.

Legitimate Speculation is so dazzling in its possibilities, that the foregoing statement of it may seem incredible. It is a perfectly truthful assertion, however, and explains why so many men, who began life without a dollar, have left from $80,000,000 to $150,-000,000 to their heirs.

XII

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

WHOEVER would make money in securities must buy them when they are cheap, all things considered, or when the stock market is about to turn for one of its major 20 to 25 point advances, and must sell the securities when they are too high, all things considered, or when the stock market is about to turn for a substantial decline. A matter of first class importance therefore is a Turning Point in the Market.

Suggestions have been made in a previous chapter, which should aid an intelligent man to form a judgment as to underlying conditions. Are there phenomena in the way the stock market acts, at any time, which will convey an additional message, with reference to the propriety of buying or selling securities?

Price movements in the stock market operate in long swings. Some of these last several months; others, barring occasional reactions, 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 major swings in prices correspond, as a rule, 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 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 become acquainted with the condition of the growing crops from planting to harvest. Various interests in the financial world have their own independent service 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 ahead. From a thousand sources of information, men of large means learn to forecast the future of business and earnings (and thus of stocks) and to adapt their own course to the coming changes. Most of the information, not all, but certainly most 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 them. If they are not apprised of every important fact as soon as the bankers, they are at any rate certain to discover it soon afterward and to publish it to the world in time for all practical purposes.

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 operators 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, these 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, numerous men of kindred abilities are the leading operators. 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. 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 market manipulators was the late 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 as remarkable.

CAMPAIGNS IN STOCKS

It is such men as these who undertake the actual management of bull and bear campaigns. The market reflects their operations and purposes much more than it does purely investment buying and selling. Stocks are inert substances. They do not change in price of their own accord. They do respond to demand and supply, that is to say to vigorous buying which reduces the floating supply and to an avalanche of selling which increases the amount afloat. They can thus be made to fluctuate tremendously in market value by a concerted campaign.

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, the great financiers and leading market operators do not wait to let events take their natural, slow and orderly course. They promote the movement deliberately and powerfully, 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 haphazard. So far as is possible, every contingency is foreseen and provided for.

No operator can appear in person on the floor of an exchange and transact 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 in the large commission houses. It is also necessary, in some cases, to arrive at an understanding with the principal owners of a given stock, which is about to be manipulated. The plotting of a campaign involves a thousand other details. The general of an army, fighting his way into an enemy's country, never had a greater variety of preparations to make, than the man 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 and interest rates must be moderate, with 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. Every man can read the signs 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 groundwork is laid, as above indicated, for a rising market, an investor should promptly buy back the stocks he 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 some large block of 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 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 manager of a bull campaign 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 finally sound or promise to become so at an early date, 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 interviews are supplied to 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 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 or more than a year. 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. He must distribute his speculative holdings to the public or he will make no money. 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 then slowly prepare 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 are placed in circulation that certain stocks are "going up ten points" or more. Often, non-dividend payers and "wild-cat" stocks and even influential, high-priced issues 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.

These days of excitement are critical 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. A turning point downward is near at hand. Too much good news is always a bad sign, because the best 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. This is the time when leading operators are selling their stocks to the public and it is called a "period of distribution."

When prices can be put up no farther, rely upon it, that the insiders are out of stocks and are preparing 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 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 skilfully 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. The New York Stock Exchange has made a strong effort to put an end to "matched orders" but has not succeeded in entirely eliminating the practice.

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 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.

CLUES TO TURNING POINTS

It is the periods of accumulation and distribution, each one covering several months, which mark the turning points and 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 conditions 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 effectively supplied 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, these diagrams are a graphic representation of what stocks are doing; and they reveal turning points clearly. 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 day, on the New York Stock Exchange.

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 always 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 things 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.

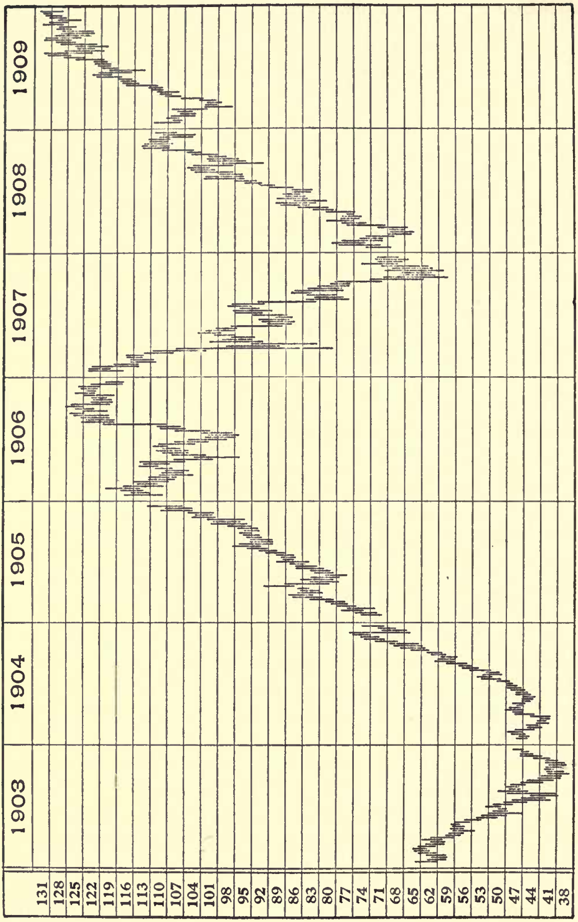
TRADING MARKETS

Periods of accumulation and distribution, during which the actual turning point arrives for one of the periodical major swings in price, are attended for several days or weeks of what is called a "trading market." There is a confused oscillation of prices up and down within a comparatively narrow radius of action. Quick traders, who throng the commission houses, practice scalping profits of a few dollars a share by buying on the declines and selling on the rallies, while the trading market lasts, although they are generally compelled to take a loss on their final purchases. Occasionally, a trading market is introduced part way up or down during a great bull or bear campaign. Thus, a trading market signifies one of three things:

1. End of a long and important decline, with slow reaccumulation of favorite stocks by private banking interests, investors, speculative pools and leading operators.
2. Temporary derangement of the bull or bear operations, due to some transient development. Instances of this character were furnished by the reaction of April, 1905, when John W. Gates's corner in wheat failed; the setback in September, 1908, when the September election in Maine discouraged business men temporarily and unnecessarily; the break in stocks in April and May, 1906, when the San Francisco earthquake frightened the holders of securities with the threat of enormous liquidation by the insurance companies; and the setback, early in 1909, when keen competition in the iron trade caused U. S. Steel to proclaim "open war in the steel trade."
3. Culmination of a prolonged rise in stocks, attended by distribution of speculative holdings of pools and operators to an unwary and overenthusiastic public.

Every trading market is to be construed by "the rule of reason." Every atom of knowledge, judgment and experience must be brought to bear at such a time in solution of the problem, as to whether the trading market is a halt, a temporary interruption of the main movement of prices, or a culmination thereof.

A chart will assist the investor materially to determine the meaning and boundaries of a trading market. There is only one of the numerous delineations of stock market movements, which an investor or long pull speculator will find it convenient or useful to draw, to wit, a representation of the high and low prices, by weeks, of the particular stocks in which he is interested, or of a group of the six most active actual leaders, the ones upon which the speculation of the times converges. The investor can also draw the high and low, by days, if he wishes; but the broader view is furnished by the high and low by weeks. A few instances of trading markets and turning points are presented on the following page.



High and Low Price, by Weeks, on Average, of six present Market Leaders.

END OF THE PANIC OF 1903

PROLONGED liquidation had taken place in 1903, aided by persistent and deliberate manipulation for the decline by interests, which had their resources free for the purpose. In September, however, the rails refused to decline any farther. In October, industrials resisted farther attack. During 11 weeks, covering those months, the six stocks shown in the chart vibrated back and forth in a 6 point trading range. The rest of the market, not represented in the chart, did little, if anything, more, and, in fact, fluctuated in strict accordance therewith. Wall Street was, at the time, in the depths of gloom. There was no harmony among financial leaders. The air was full of predictions of much lower prices for stocks, of coming insolvency of corporations, and general prostration of trade. And yet, for 11 weeks, stocks refused to drop below a certain average level, and they rallied resiliently after every raid by the bears. This fact alone would have suggested that stocks were at the turning point.

A thorough and broad review of fundamental conditions supplied a correct interpretation of the trading market of September and October, 1903. First, the year's harvests were ample, slightly below previous high records, but much above the 10 year average. Next, general trade had suffered only moderately from the woes of Wall Street. Iron and steel were the worst hit, not so much by reason of the panic, however, as on account of protracted strikes in the building trades and temporary inability of the railroads to buy supplies freely. Every one knew this to be a transient phase. The tariff laws continued to favor protection to manufactures. Restoration of public confidence was alone required to revive manufacturing, all along the line. Foreign trade was giving the United States a larger favorable balance (by from $20,000,000 to $60,000,000 a month) than during the previous year, the enormous importations of materials for manufacturing having fallen off heavily. Gold was being imported freely. Railroad earnings, both gross and net, were comfortably larger, month by month, than even in the boom times of 1902.

Now, in October, 1903, stocks were selling at prices which, on average, yielded an income as follows:

26 rails: Income yield, 5.2 per cent; average dividend, 5.3 per cent.

21 industrials: Income yield, 6.77 per cent; average dividend, 5.54 per cent.

28 preferred industrials: Income yield, 8.9 per cent; average dividend, 6.78 per cent.

They were, on the whole, all on a good investment and speculative basis.

Experienced observers knew that all the substantial fundamentals promised an early revival of business and a great recovery in prices after 1903. The trading market needed to be construed, therefore, as an evidence of an accumulation of stocks by leading interests, and the actual turning point for a rise.

END OF THE PANIC OF 1907

A GLANCE at the chart will show a trading market in October and November, 1907, lasting about two months. That was a time of terrific excitement and extraordinary fluctuations in prices. Low as was the market, an effort was made to smash it yet farther by all the tricks at the command of seasoned operators. The one manipulator, who worked the hardest in that period to shatter every vestige of common sense and hopefulness left to the general public, retired after the panic, with a fortune of between three and four millions of his own, which they had allowed him to make in return for his valuable services, but broken in health; and he spent most, if not all, of his time afterward, for years, in Europe.

In that trading market, the movement of stocks was more confusing and excited than in 1903. The precise turning point was not clearly manifest at the time. The trading range averaged about $10 a share. In special stocks, frequent changes of $10 a share in price occurred in one day; and this went on until a considerable part of the investment and speculative world became thoroughly bewildered, utterly unable to discern what all this would lead to. That was part of the object of the sensational antics of the market. The big men were buying stocks by the ton, and did not care to have any one else pick the good bargains.

When the panic of 1907 culminated, there were few crumbs of comfort in the immediate situation, for the investment world, and for those who prefer the bull side of stock speculation. Trade, manufactures and earnings had received a disastrous setback. Nevertheless, amid all the Stygian darkness of that period of deepest gloom, any observer who had watched the stock market, calmly and dispassionately, would have noticed some things of great interest. Take the income yield of stocks:

29 rails: Average dividend, 5.96 per cent; income yield, 6.75 per cent.

25 industrials: Average dividend, 5.84 per cent; income yield, 9.01.

24 preferred industrials: Average dividend, 6.46 per cent; income yield, 9.23.

Those facts alone indicated that stocks were on the bargain counter. The crops of 1907 had been ample. Other conditions in October and November were as bad as could be imagined. Trade, manufactures and earnings had received a setback of unprecedented severity. Money was high, 7½ per cent for long time loans and almost none to be had; call money from 10 to 125 per cent, at times. The banking situation was awful and growing steadily worse. And yet, as the weeks passed by, the trading market continued. Stocks simply refused to go any lower. Finally, in the first week of December, there was a smart break-away from the long deadlock, on the upward side. That was the signal that the turning point had been passed in the stock market. Thereafter, both industrials and rails were a purchase on every reaction, for handsome profits later, and especially after the secondary reaction, early in 1908. Liquidation had been so enormous, that monetary stringency was positively destined to vanish within a very few months, and did so vanish.

THE TOP IN 1906

At the culmination of the excited boom of 1906, the stock market fell into a trading position which lasted for 18 weeks. No man of experience could have failed to interpret the tremendous manipulation and the succession of furious million-share days at the New York Stock Exchange, as anything other than culmination of the long and powerful rise and the actual turning point for a decline. St. Paul had risen until it was yielding only 3.69 per cent on the investment at going market value; Great Northern, 2.06 per cent; Delaware & Hudson, 3.09 per cent; and 29 rails an average of 3½ per cent, the average dividend being 5½ per cent. The banks were in perilous position. Money was high. Fundamentals were adverse and presaged the approach of a Crisis. When, in December, 1906, stocks broke below the 18 weeks' trading range, the turning point had passed.

TURNING POINT IN 1909

In 1909, the trading market at top lasted 22 weeks. The banks were in bad shape. E. H. Harriman, one of the impelling spirits of the boom, had died. Financial powers were in discord. Income yield of prominent investment shares was below the current rates of interest on long time loans. Public hostility toward "big business" was acute. Stock exchanges were themselves under fire, on account of alleged iniquities practiced by speculators in those marts. A calm review of the whole situation would have established the meaning of the trading market clearly, as a turning point, and would have warranted all prudent men to sell their securities. A reaction was foreordained. Daniel G. Reid's hilarious exploit of December 27th in shooting Rock Island, common, from 50⅝ to 81 and breaking it to 49¾ in half an hour's time, foolish, trivial, and episodal as was the whole affair, was itself a specimen of the antics, which characterize the ending of a boom in stocks. A drop in prices in January, 1910, below the trading range, was equivalent to an imperative order to investors to sell their securities, because the turning point had passed.

TRADING MARKETS, PART WAY

In essential features, these phenomena are all alike and can be interpreted by the conditions and developments of the times. Those of 1905 and 1906 were each brought about by a sudden and surprising development, which however, did not permanently change the drift of the times.

In 1905, the temporary halt, reaction and trading market grew out of the unexpected collapse of John W. Gates's corner in May wheat in Chicago. Mr. Gates had forced the price of May wheat from 85 cents a bushel to $1.22, but he could not liquidate to advantage. He was deluged with wheat. In April, his associates and he abruptly threw large holdings of prime stocks upon the New York Stock Exchange, in order to obtain sufficient credit at the banks to bolster up their speculation in wheat. Actual liquidation, always dreaded by speculators, was so apparent, that the whole professional fraternity promptly sold stocks short, hastening the reaction, while Thomas W. Lawson of Boston published a sensational advertisement, headed "Panic Coming." The reaction was a sharp one, averaging $12 a share in leading stocks and amounting to $23 a share in Union Pacific. A trading market succeeded, lasting 6 weeks. It was easy, by reference to fundamental conditions and the income yield of stocks, to construe this episode as no more than a temporary interruption in the main slant of prices.

In April and May, 1906, the San Francisco earthquake and fire led to a short lived panic and reaction. It was a performance of the same general character, as that of 1905, and could have been interpreted by the same methods. A four weeks' trading market finished the episode.

TURNING points arrive normally during trading markets and never otherwise, except when a sudden panic breaks out due to some unforeseen calamity such as the general war in Europe in July, 1914. A trading market can commonly be resolved as to its meaning in the light of fundamental conditions, reinforced by chart indications. During the stately progress of a great bull market, minute and daily attention to fundamentals and charts can be postponed. But in a great crisis, and after one, when the stock market falls into a trading position, then investors and all operators in securities must give close heed to a careful estimate of basic factors and to a chart of what the market is doing.

XIII

DULL DAYS AT THE STOCK EXCHANGE

WHAT THEY PORTEND.—A FEW NOTEWORTHY EXAMPLES

EXTREME stagnation in investment and speculative operations at the stock exchanges is a phenomenon of marked significance and is the precursor of a coming strong movement in prices, constructive or destructive. It is frequently, although not invariably, a trait of a turning point in the market. Because it is not so invariably, the subject demands separate treatment.

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 intensely interesting. 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—in the Summer, 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, and from the comparative smallness in the volume of trading after the frenzied excitement of culmination of either a great boom or a great liquidation.

Citing the unusual periods, first, it may be said that extreme dullness in the stock market has preceded a serious break in prices, twice during the last twenty-five 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. In July, there was almost a total cessation of trading at the New York Stock Exchange. The Silver Purchase act 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 had 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 a 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, was one of the signals of 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 public affairs even more terrible than the war in Europe in 1914–15.

These two cases are the only ones of importance within twenty-five 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 dullest 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. In each instance, 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 recorded in January and February. Sales averaged about 120,000 shares a day. Utter and hopeless inertia had settled down upon the market. No broker was earning 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. August 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. From the 1,995,000 shares of April 21st, sales had fallen off to 178,400 shares on June 9th. 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, 1902, 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 whole period from March to June, both inclusive, was, in fact, extraordinarily lean for stock brokers, whose income is derived from the buying and selling of securities by their customers. In the week ending March 5th, total sales at the Exchange in New York amounted to only 942,570 shares. March 10th, sales fell to the negligible and extremely low figure of 74,700 shares. During the last week of April, total business at the Exchange in New York aggregated only 1,070,000 shares. On June 28th sales of 87,900 shares only were reported.

The panic of 1903 had 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. 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 later, the market rose to the highest point ever known, exceeding the high average of 1864.

Phenomenal dullness also reigned in Wall Street in June, 1905. A 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 1,794,455 shares, little more than one full day's business in times of active manipulation. On the 15th, 134,400 shares were done. Drowsiness fell upon the market, the stock ticker, and all things animate in Wall Street. On the 17th, Saturday, 82,920 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 ⅛th of a point; Union Pacific, ¼th; and United States Steel, preferred, ⅜ths—all magnificent stocks whose enormous volume on an active day is a feature in all furious trading. That was the record for extreme inactivity of movement in the stock market. 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.

In 1908, comparative dullness prevailed in the buying and selling of stocks for a few weeks before the great rise of the year began, but the volume of sales was not notably small.

In November, 1913, however, another example of extreme dullness was recorded. Stocks had declined substantially from the top of 1912 until June, 1913. They had had a smart rally on short covering, followed by the secondary decline which is a characteristic trait of the stock market. In November, bottom of the secondary reaction was indicated by a complete end of liquidation and a number of small share days. On Monday, November 24th, dullest day in twenty-five years, sales at the big Exchange in New York fell to 57,600 shares. This was the point from which started a vigorous rise into the following January.

Enough has been said to show the importance of paying careful attention to periods of remarkable dullness in the stock market. They may be 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.

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.

XIV

NORMAL YEARLY MOVEMENTS OF PRICES

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

In 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, 1904, 1908, and 1915, during which stocks whirl rapidly upward, with only the most trivial reaction, 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 to ascend, 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 tumble steadily for twelve months or so, with only the most feeble and uncertain rallies. Such years were 1873, 1876, 1890, 1893, 1903, 1907, and 1910.

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 movements 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 $270,000,000 or more in dividends and interest on their security investments. Some distribution of this character takes place, indeed, every month, the sum ranging from $110,000,000 to $140,000,000. 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 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 do not always wait until their dividends and interest have actually been paid to them. If the general outlook is favorable, they begin to invest 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.

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 mount from $5 to $20 or more a share. The lively stocks rise from $30 to $50, or more. January is top of the acclivity 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 rally is generally the more important. Stocks start from some low level in the Spring or July and climb upward into August. Then, frequently 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 5,000 to 20,000 shares, for the sake of the normal yearly turns, has grown immensely within the last twenty years.

Normally, there are also at least two undulations downward in prices in every twelve months. A variety of causes contribute to the result; but in past years, both could have been 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 is well understood. 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, the Hessian fly, drouth in the hot season, and unseasonable frosts have not lost their terrors. If other influences have conspired to abate 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 downward flurries 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 prevailed before the Federal Reserve system was established, 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 their speculative holdings 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 uncommon for lively trading stocks to descend in price $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 has heretofore occurred in the Fall. It has been primarily due to a scarcity of loanable funds in New York at that season and has been 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 were formerly in the habit of drawing down their balances in New York and other central cities; and other sums, large in the aggregate, were withheld from deposit. While the banks of the West and South are expected to finance the farmers and planters in the Fall months, they could not do it before 1914 without recalling millions of their surplus money from the East; and they began to draw in August. The total amount sent away from New York for harvest purposes, each Fall, varied with the size of the crops. It was seldom 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 have been 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. An unfortunate turn in the State elections in September has occasionally assisted to precipitate the Fall reaction, as in 1908. 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 depressed, 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.

In 1915, lacking the old time scarcity of loanable funds and the high rates of interest common in the Spring, the reaction usual at that stage of the year was brought about by a war scare over the sinking of the steamship *Lusitania,* which supplied the excuse for a slump of 8 to 20 dollars a share in steady going investment issues and from 10 to 30 dollars a share in the war order stocks. Whatever reactions took place in the Fall of 1915 were due merely to profit taking by speculators on the war issues mainly.

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 oscillations of the stock market. In fact, it is sometimes of the greatest importance that he should do so. Every great 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 after 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 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.

Whether or not the growing strength of the Western and Southern banks and the new Federal Reserve system will serve to eliminate the normal Spring and Fall reactions, time alone will decide. Certainly, money stringency in New York at those seasons of the year will probably be avoided hereafter in normal years. So firmly fixed, however, in the minds of speculators, is the idea of Spring and Fall reactions, that they may continue to be brought about by an overbought condition of the stock market and by profit taking.

An investor needs hardly to be advised on one point, yet for a definite understanding 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.

On account of its bearing on the subject of normal yearly movements of prices, the following statement of the characteristic traits of each month of the year will be of interest:

JANUARY: This is proverbially a month of higher prices. In all years, when conditions are ripe for panic and depression, the apex of market values for that year is recorded in January, as was notably the case in 1861, 1865, 1873, 1876, 1903, 1907, and 1910. In 27 years since 1890 inclusive, January prices have been higher than in the preceding month, 17 times. They have been top of the year, 6 times. While investors are in January applying their surplus funds, arising from the huge January disbursements, to the purchase of securities, speculators who had previously bought in anticipation of the January investment demand selling out. A reaction in the latter part of January on speculative profit taking is a common occurrence. Cash flows from the interior into New York during January; and bank reserves tend to increase and interest rates to go lower. When banking and other conditions are bad, a reaction in January is a sign of coming troubles, especially after a great bull market the year before.

FEBRUARY: In the last 26 years, the stock market has recovered from the January reaction, or has continued the January rise, giving the month higher prices than in January, 12 times. Except in powerful bull years, February habitually witnesses a reaction on dullness in trade and speculative profit taking. This is especially true in years when money is high and when the growing Winter wheat crop has been damaged by unfavorable weather.

MARCH: In panic years and bear markets in the last stage of a Cycle, the downward trend of values becomes pronounced in March. March has in the past been a month of falling bank reserves and higher money, in consequence of the flow of cash to the interior for payment of farm labor and supplies for the planting season. Interest rates have been high in New York. This influence may hereafter be nullified by the new Federal Reserve system and by the enormously expanded strength of the Western and Southern banks, which now aim to finance planting and harvest in those sections themselves. March is habitually a month of reaction in the stock market, followed by a start for the normal Spring rise. In strong bull years, March continues the upward swing of prices. It is on these two accounts, that in 26 years past, March prices have risen slightly higher than in February, 15 times.

APRIL: This month is characteristically the occasion for the Spring rise; and the rise is more or less substantial, according to the promise of the crops as indicated by the area planted and by weather conditions, and according to the stage of the current Cycle and other circumstances, favorable or otherwise. The great rise in April, 1915, was due to the promise of enormous profits to manufacturers of war munitions in this country and the almost unprecedented prices paid by Europe for American grain and flour. It was also coincident with the beginning of a new Cycle. In 26 years past, April prices in the stock market were not lower than in March, 18 times, and were in almost all cases much higher. After April, market values tend lower for a time, except in powerful bull years, when nothing can stay the irresistible advance in stocks, as in 1902 and 1908. The Spring boom in general trade culminates in April.

MAY: May sometimes continues and carries to its culmination the Spring rise, the stock market being higher than in April. This has been the case in 12 years out of the past 26. May is, however, normally a month of reaction, partly due to speculative profit taking. Unfortunate accidents in affairs, such as the corner in Northern Pacific in 1901, the San Francisco earthquake in 1906 and the sinking of the *Lusitania* in 1915, with other incidents of an untoward nature, inevitably precipitate a reaction in May or at least furnish an excuse for what would have happened in any event. In May, the promise of the crops begins to be distinct; and any shattering of the hopes of the farmers and financial world, as to the crops, aids in promoting a May reaction. In normal years, the trading fraternity in Wall Street begins to look forward to the Summer vacation time; and the more cautious ones sell out their speculative holdings, on the principle of being out first. This selling is one of the influences, which promote the May reaction. In panic years and bear years, the stock market has invariably been lower in May than in April. Summer dullness in trade begins in May.

JUNE: June is commonly a period of hesitation in the stock market. Balances in foreign commerce are small; gold exports are the rule in normal years. A vast multitude of well-to-do persons are preparing for vacation absences from town; and speculators clear out their speculative holdings of securities. In June, extent of the cotton planting becomes known and preliminary estimates can be made as to probable grain production of the year. In June, stocks respond to the particular circumstances of the time, but seldom enter upon an important rise. In fact, it is only when fundamental factors are exceedingly strong, that June is a month of rising market values. In 26 years, June prices have been somewhat higher than in May, 14 times. In all other years, they have been lower or merely on a parity with May. Panics almost never culminate in June, but bear markets sometimes do, as in 1860, 1882, 1884, 1900 and 1913.

JULY: July is the month of vacation absences, crop scares, reduced railroad traffic, small balances in foreign commerce, and about half the time of gold exports. It is notably a month of dullness in the stock market and of small volumes in the trading. It is the month in which wise men buy stocks, if conditions are promising. Bear markets often culminate in July, as in 1860, 1889, 1893, 1898 and 1910. Culminations of a bull market are practically never known in July. In the past 26 years, July prices have been somewhat higher than in June, 11 times only. In other years, they have been lower or on a parity with June. The Fall rise finds its inception in July.

AUGUST: In August, Summer apathy is at an end. Thousands of persons return to their homes from vacations. The huge July disbursements have begun to stimulate investment buying. Speculators take on stocks with the object of selling them at higher prices to investors. Condition of the cotton and grain crops is, by this time, well understood. If the soil and the weather combined have refused to produce vast agricultural wealth, the Fall rise is moderate; if, on the other hand, the promise is brilliant, the stock market fairly booms in August. August is the month of the Fall rise. There has been an excellent advance from the low prices of July, for at least a part of the month of August and commonly during the whole month, 18 times in the last 26 years. Prices have been lower or on a parity with July, 8 times. In 1863, 1870, 1884, 1889, 1895, 1902 and 1909, August saw the highest prices of the whole year; in 1878, 1883, 1896 and 1914, the lowest of the year. While the exchanges were closed in August, 1914, an open market for securities was established on New Street, in New York, and the level of prices in August was lower than in July. If the August rise halts the last ten days of the month, there is usually a reaction thereafter. Cash begins to go out to the grain and cotton States and interest rates rise in New York.

SEPTEMBER: Depending upon fundamental factors, the Fall rise frequently lasts into September and has done so in 12 years out of the past 26. This is a month of great profit to the railroads, on account of the rush of the crops to market. A reaction in September, in consequence of speculative profit taking and farthered by any untoward occurrence in affairs, is almost an invariable rule, however, such a reaction having been witnessed in 20 years out of 26. Bull markets seldom culminate in September, because in spite of the normal September speculative shake out, if conditions are favorable, the broad trend of stocks continues on the upward slant until three or four months later. In 14 years out of the past 26, the stock market has either been lower than in August or on a parity with August. In bear markets and panics, culmination of the long and frightful downward swing of prices takes place, as a rule, somewhere in September, October or November. In 1911, the bear market ended in September.

OCTOBER: This month bears the evil reputation of being customarily a period of reaction. Even when a powerful bull movement has run on into October, as it has done 10 times in the last 26 years, the month frequently ends in reaction. In 26 years, October has been lower than the month before, 13 times; on a parity with September, 3 times. The panics of 1903 and 1907 culminated in October or within a few days thereof. October is always a critical month. Foreign trade balances in favor of the United States are generally the largest of the year in October, and gold is usually imported. But cash continues to leave New York for the grain and cotton States.

NOVEMBER: High prices for the year were seen in the month of November, in 1896 and 1899. Low prices of the year, in 1890 and 1897. November follows the October reaction and precedes preparations for the January rise. It is a month in which little happens in a general way; but if conditions promise a substantial January rise, wise men begin to reinstate holdings which were sold in October or the month before. In strong bull years, there is a substantial recovery from the October reaction or a continuance of the bull campaign. Hence, in 26 years, prices have been higher in November than the month before, 9 times; lower than in October, 10 times; on a virtual parity with October, 7 times. Railroad earnings are always at the crest of the year in November, in consequence of the crop movement. Balances in foreign commerce are usually nearly as large as in October; once in a while, larger. Gold is imported normally. Cash begins to return from the agricultural districts to New York and money rates ease in normal years.

DECEMBER: Prior to establishment of the Federal Reserve system for the National banks, December was usually a month of tension in the money market. Corporations and banks prepare in December for January's huge dividend and interest disbursements. Hence, reactionary tendencies are frequently observed in December. In 14 years out of 26, December prices were lower than those in November, on average, and were higher in only 12 years. In six of those years, namely, 1898, 1900, 1904, 1905, 1908 and 1915, standard investment shares were at their highest for the year in December, sustained bull markets having been in progress. The December reaction is, however, not usually of great importance, certainly not when the financial world is beginning to recover from a panic. The December reaction is ordinarily a mere speculative shake out, preparatory to the January rise.

XV

WHEN TO BUY

WHAT CONSTITUTES THE EVIDENCE.—STATISTICAL KNOWLEDGE DESIRABLE.—DOCTRINE OF FIVE-YEAR AVERAGES.—REACTIONS, HALF-WAY BACK.—A CODE OF RULES FOR BUYING

IT is taken for granted that an investor or an operator has sold stocks and bonds at remunerative prices during the boom at one of the crests of a Cycle, and wishes to reinstate his holdings lower down; or that, at some stage during a Cycle, he has come into the possession of funds, not essential to maintenance, which he wishes to invest safely and profitably. It is presumed, also, that he will confine his dealings to standard, respectable and long established securities, and that he will know something about them. In order to increase his capital, he must buy securities when they are cheap, all things considered, and around the approximate bottom of a strong decline.

An investor will gain nothing by haste, by acting on impulse. Nor will the long pull operator. Patience, the infinite patience which characterizes the security transactions of dominant and successful spirits in finance, is always the most profitable of all virtues in Wall Street, and conspicuously so while waiting for the time to buy. By proceeding in a cool, matter-of-fact way and waiting for clear indications, the purchaser of securities will commonly be able to buy many dollars a share less expensively than he would otherwise. Safety of capital can only be assured by buying when securities are practically at their cheapest 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 dividend by patient delay, and a man who cannot wait for a decline has no business to put money into securities. If, in addition to safety of capital, a man wishes to add an increment to principal, he must certainly wait until a reaction has practically reached a standstill and must certainly not buy during the whirl of a furious rally.

While awaiting his opportunity to buy, the intending buyer of securities can amuse himself and add to his efficiency in investment by certain transactions in the comfortable seclusion of his library, if he is a man of leisure, or, if he is a man of affairs, by having the work done for him by an employé. He should obtain certain statistical data as to the stocks and bonds he proposes to buy, and should draw a chart of their movements in price for a few years past.

STATISTICAL FACTS, DESIRABLE

INVESTMENT and speculation can be reduced to a science, wherein as little as possible is left to chance. The man of large means simply tempts fate unless, to begin with, he knows exactly what he is buying and what he is buying it for. The pools and conspicuous operators leave as little as possible to chance or accident. They know all there is to know down to the last iota of fact. To pattern one's own strategy upon the example of successful conquerors is the aim of every warrior. A part of an investor's preparation to buy should be to know what he is buying. No thrifty man would become part owner in a dry goods store, a factory or a shipyard without having first examined the books and accounts and gained a thorough comprehension of present status and future possibilities of the business. Why then should he enter a corporation without preparation? It is suggested that a scrap-book or portfolio be collected with reference to each stock or bond the intending purchaser has in view, and that a statement be prepared for each portfolio, which will set forth the vital facts as to intrinsic and speculative value. The skeleton form, set forth below, will serve to build upon. Statements can be made as elaborate as one chooses.

UNITED STATES STEEL, COMMON

BOOK VALUE: Nominal, as figured from annual report for 1914, is in excess of $100 a share. John Moody calculates book value at $77.21, starting with original assets, as computed from market values of the securities of the constituent companies (an erroneous basis in my opinion), and adding thereto merely the new construction and accumulated surplus. As figured by the Bureau of Corporations (prejudiced), $50 a share.

Investment Value: Actual value in dissolution would depend on book worth of the properties being realized, and earnings of the new companies. I figure it at not less than $100. The stock is due to pay 5 per cent a year; and investors now demand 6½ to 7 per cent from industrial common shares. Assuming permanence of the 5 per cent dividend, United States Steel must be considered safe for investment (and has always been, theoretically and practically) when income yield is between 7 and 8 per cent, or, in other words, when the stock is selling between 60 and 65. At 50, in 1913, income yield was 10 per cent and the stock was a wonderful purchase.

Speculative Possibilities: Steel's range in price, while paying 5 per cent, was from $50 to $94⅞ a share. Steel is a universal favorite in speculation. It is extensively bought and sold. Its major swings in price are not less than $30 to $40 a share. Intermediate manipulative swings $7 to $11 a share. The stock can never be really cornered; there is too much of it; hence, it is a favorite short sale with the professionals, on proper occasions. Its history to date shows that it has always been a short sale, above 80, even if it went higher afterward; and a purchase at 65, even if it went lower afterward. It is to be noted, that many of the leading stockholders in United States Steel speculate heavily in its shares, a circumstance which ensures an active market and big swings in price.

Financial Backing: The most powerful and influential in the United States, including J. P. Morgan & Co., giving great stability to the corporation. Interlocking interests of controlling spirits ensure a volume of business which could not otherwise be commanded.

Management: The highest in technical skill and energy and thoroughly constructive. Witness, the great expansion of sales abroad; the ability with which prices are kept low enough to avoid creating fresh competition; the vast assets now behind the common stock; etc.

Tariff Laws: Duties are yet moderately protective, although lower than formerly. Should protection be eliminated from the laws, profits would suffer unless wages were reduced. With its enormous and scientifically equipped plants, United States Steel is in a better position to withstand foreign competition than most of its rivals.

Earnings: Ordinarily far in excess of the 5 per cent dividend, even after deducting from $18,000,000 to $47,000,000 a year for depreciation and new construction. In the March quarter of 1915, net profits were $5,389,861 less than required, even after omitting the common dividend. The deficit has now been made up by increased volume of business and higher prices for finished products. Earnings in 1915, estimated at 10 per cent.

Union Pacific, Common

Book Value: Nominal, as per annual report of 1915, $160 a share.

Investment Value: Actual value is rated by competent bankers as between $225 and $250 a share, owing to the high market rating of "securities owned" and various "hidden assets." As an 8 per cent stock, Union Pacific is always a good investment at $120 a share or less and is too high to keep at $170 a share or more.

Speculative Possibilities: Union Pacific's range in price since being placed on an 8 per cent dividend basis has been from 112 to 141½. A lively campaign is always in progress in this stock. The pools have always tried for between 40 and 60 point swings in the price. Intermediate movements, 22 to 30 points. For legitimate speculation, Union Pacific is always a purchase, in ordinary times, at 120 or lower, and a short sale at or above 160. In great bull campaigns and panics, those limits will be exceeded. Insiders in Union Pacific are active speculators in the common stock, a fact which accounts for its activity in the market and wide swings in price.

FINANCIAL BACKING: Union Pacific commands the support of several of the greatest bankers and bond houses, both in this country and abroad, particularly that of Kuhn, Loeb & Co.

MANAGEMENT: Of the highest quality in every respect, financially and otherwise. No elaboration of this point is necessary.

TARIFF LAWS: A revenue tariff would enable the company to purchase its supplies somewhat cheaper.

OTHER LAWS: The whole body of railroad legislation is in the direction of restricting freedom of action, with reference to rates, capital issues, etc., and an increase of the burdens of taxation. An investor needs to keep an eye on this matter.

EARNINGS: These have usually been equal to 16 or 19 per cent on the stock. Now, around 10 per cent. "Other income" of this company gives Union Pacific a unique position; this "other income" formerly met interest on the funded debt and the preferred dividends, leaving the whole of the "income from operation" entirely for the common stock and improvements. It is nearly equal to this now. Competition, emanating from the Panama Canal, is slightly detrimental to net profits of Union Pacific, but does not yet menace the 8 per cent dividend.

FIVE YEAR AVERAGE PLAN

To clear away one misconception, at the start, allusion may be made to the doctrine, entertained by some and a favorite abroad, that a stock is to be bought when it has fallen to, or below, its average price for the last five years. If that plan had been followed in 1905, one might have tried to buy some one or more of the then excellent stocks, named below, at the prices set opposite:

Amer. Car & Foundry, pfd.	$78	Louisville & Nashville	$108
Amer. Locomotive, pfd.	88	Manhattan Elevated	131
American Sugar	127	*Mo. Pacific	102
Atchison	67	*N. Y. Central	142
Baltimore & Ohio	90	*N. Y., N. H. & H.	211
Canadian Pacific	114	*Pennsylvania	70½
Chicago, Mil. & St. Paul	157	*People's Gas	102
*Chicago & Northwestern	193	Southern Pacific	52½
Delaware & Hudson	154	Union Pacific	97
General Electric	198	U. S. Rubber, pfd.	65½
Great Northern	188	U. S. Steel, pfd.	79
Illinois Central	139	Western Union	88

Only six of the stocks named, those marked with an asterisk, fell as low in 1905 as the prices given and very few of the others came anywhere near the buying figures. Indeed, few others fell in 1905 to their five year average. Obviously, this method of judging when to buy would have had little value in 1905.

Conversely, what would have been the result of following the five year average principle in 1914, making use of the same list?

	5 year average	High and low in 1914		High and low in 1915	
*Amer. Car & Foundry, pfd. .	$118	$112	$118⅞	$111½	$118
Amer. Locomotive, pfd. . .	106	96	102½	75	105
*American Sugar	119	97	109⅞	109	119½
*Atchison	106	89½	100⅜	92½	111¼
Baltimore & Ohio . . .	106	67	98⅜	63¾	96
Canadian Pacific . . .	216	153	220½	138	194
Chicago, Mil. & St. Paul .	125	86	107⅛	77¾	101⅛
Chicago & Northwestern .	152	122	136⅞	118½	135⅛
Delaware & Hudson . . .	168½	138¾	159½	138½	154⅛
*General Electric	159	137½	150⅝	138	185½
Great Northern	134	111⅝	134¾	112¾	128⅜
Illinois Central	134	103½	115	99	113
Louisville & Nashville . .	145	125	141⅞	104½	130½
Manhattan Elevated . .	136	128	133	125	132
Mo. Pacific	50	7	30	1¾	18¼
N. Y. Central	114½	77	96⅝	81½	110½
N. Y., N. H. & H. . . .	138½	49⅝	78	43	89
Pennsylvania	63	51¼	57¾	51⅞	61½
*People's Gas	111	106	125	106½	123½
Southern Pacific	123	81	99½	81¼	104⅛
Union Pacific	172	112	164⅜	115¾	141½
*U. S. Rubber, 1st pfd. . .	108½	95⅛	104⅝	101⅜	110
U. S. Steel, pfd.	123½	103¼	112¾	102	117
*Western Union	72¾	53⅜	66⅞	57	90

The tabulation speaks for itself. All of these shares fell below the five year average in 1914 and 1915. Some of them will remain below for years. From only 7 of the 24, designated with an asterisk, could the investor have reclaimed his capital intact in 1915.

The plan of buying, with reference to a five year average price, utterly ignores the theory of Cycles. It would have answered during certain periods after the Civil War and in the '80s and '90s. In 1903 and 1904, the plan might have been good enough, because there had been heavy depression with heavy drives at prices; but, in those years, other potent considerations would have dictated the purchase of securities for investment and speculation, and these considerations would have been convincing and sufficient. On the whole, the five year average can be so little depended upon that its practical value as a guide is almost nil.

In other lands, and in periods, in which conditions are stationary, the five year average plan may answer in a given year. Some other guide must be sought in a region like the United States, where conditions are never stationary and where powerful underlying forces operate to bring about serious alternations in the market value of securities.

There is one contingency in which the doctrine of average price may be acted upon. When a stock, or group of stocks, has risen rapidly from a previous low level, it is apt to react nearly or quite half-way back before resuming its upward swing. The phenomenon is seen more distinctly in the speculative and highly manipulated shares. Stock exchange records contain thousands of illustrations.

Reactions half way back are visible in some of the charts of stock values in this book. An investor who has become convinced that a long reign of prosperity in trade, manufacturing and transportation is denoted by basic factors, and that the bull market in securities will persevere for many months or a year, can usually buy his favorite stocks, with entire safety, on these half way back reactions, if he missed his opportunity at the bottom.

EVIDENCE OF THE TIME TO BUY

THE time to buy is always to be judged by the volume of evidence on hand, which points to the approaching end of a substantial decline and a coming advance of securities in price. There seldom can be exact mathematical demonstration that the exact bottom of prices has come. Satisfactory evidence is, however, not difficult to obtain. To quote from Greenleaf: "The circumstances which will amount to this degree of proof can never be previously defined. The only legal test, of which they are susceptible, is their sufficiency to satisfy the mind and conscience of a common man; and so to convince him, that he would venture to act upon that conviction, in matters of the highest concern and importance to his interest." It is not difficult to assemble the evidence, which will indicate that the time has come to buy, so as to reach a sufficiently accurate conclusion.

The best guides are a knowledge of the trend of underlying conditions and the phase of the current Cycle, through which the country is passing; common sense; a clear understanding of the high and low levels, at which favorite stocks have sold in previous years, and of the financial status of the corporations, which they represent; and lastly, the action of the stock market itself, as exhibited by a chart of high and low prices by days or weeks.

Assume, first, that a period of depression has prevailed for six months or a year, and that the country is entering upon the first or the third quarter of a Cycle. There may have been a panic and terrifying slaughter of values. Can an opinion be gathered from responsible sources of information, that compulsory liquidation of speculative accounts in the stock market has practically been concluded? Does the stock market fall dull on reactions, showing that there is no more stock for sale? Does fresh bad news fail to bring on another smash in prices? Are bank reserves on the mend? Is there a promise that interest rates will soon fall to normal, or are loans actually being made to merchants at 3 to 3½ per cent, the figure which customarily marks a plethora of money in the banks? Is the income yield of tried and seasoned stocks much greater than their dividends? Is sentiment hopeful in the iron and steel trade? Do railroad earnings keep up, or, if they have fallen off, is there promise of an early resumption of traffic? Has there been a large planting of grain and cotton and is the weather favorable to the crops? In a year, when these questions can be answered in the affirmative, the time to buy is during a strong drive at prices with heavy trading at the stock exchanges, some time in the months from July to October. In every year of depression since 1860, bottom has been reached some time between July and October. Stocks may have seemed amazingly cheap in the Spring of those years, all things considered, 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 and long pull operator is then merely reinstating his holdings of sound securities, 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.

July and January are the two months in each year when dividend and interest disbursements are at their maximum, amounting now to around $250,000,000 in each of those two months. The "January investment demand" for securities is a tradition of Wall Street. Probably more ready money is available for the purchase of securities, and it is understood that more money goes into stocks and bonds in July and January than in any other months of the year. January is the favorite investment month. It cannot, however, be too strongly impressed upon the mind, that January is precisely the worst month of the year for these purchases, unless at that time the country is entering upon the first or third stage of a Cycle. July is usually the better month.

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 and long pull operator can accumulate all the stocks he wants without bidding up the price in doing 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 accrue to the public not only in the form of dividends, interest and profits from private ventures of all kinds, but from the very rise of the stock market itself. Activity in trade, good crops and successful business and professional enterprise result in an unending stream of surplus profits to a legion of men and women. As a matter of fact, the amount of money, which becomes available for investment swells, year by year, month by month, while the good times prevail, and is at its maximum just as the good times are about to end. This is a circumstance which enters into the plans of market manipulators and professional operators, and explains why they strive to move the whole body of good securities upward, and ever upward, as long as the public is making money. What must the investor do with his surplus money at such a time? 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 should invest at once. Those who have stocks to sell want his money; and they will put forth every effort to induce the generality 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? In what quarter of the 10–11 year Cycle are we? Does disturbing legislation threaten? Have there been exposures of fraud or wrongdoing? 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 deposit his surplus money in a good bank and leave it there, and 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 reorganized. A great deal of money has been made in such stocks. One needs only to compare the present value of Atchison, Baltimore & Ohio, Northern Pacific, Reading, Erie, and Union Pacific, to realize the profits which have been made by courageous buyers, who accumulated 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 \$50 a share, 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 one can buy a stock, on which all the assessments have been paid.

A CODE OF RULES

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

1.—In years of panic, trade depression and reactions, buy only in the late Summer or Fall, on some strong drive at prices, and when income yield from a stock is larger than the dividend!

2.—In years of improving 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 so dull for several days or weeks as to excite comment in the newspapers!

3.—In a good year, buy during a panic caused by some transient development which does not alter the broad trend of conditions, or on 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, that is to say, if income yield is now less than the dividend!

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!

10.—Never buy in January, except in those years which begin the first or third quarter of a 10–11 year Cycle!

11.—Buy when, after a trading market lasting several weeks, the tide of prices begins to rise and breaks above the trading range!

12.—After you have bought, do not sell out on the first smart rally! Wait until it is written that the time has actually come to sell!

XVI

WHEN TO SELL

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

IN Wall Street, among the men who trade actively in stocks, in order to catch the 3 to 5 point 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 the rise 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 profit taking, 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 these 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 \$50 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 may prevail on every side. Sales may have mounted 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 which attend the top of a bull movement. 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 arrived 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.

The continuous parabolic curve, described by a sky rocket at the top of its flight, is much more regular and orderly than the proceedings, which take place at the top of either a great bull market or a 25 point trading turn in stocks. It is not difficult to judge, closely, when a sky rocket will turn for its graceful earthward descent, because its speed slackens slowly and mechanically until, just before the turn, all headway is lost. On the other hand, the last part of a great stock market advance is commonly the most swift and violent of the whole movement; and thereafter, there always ensues a series of wild and eccentric gambols in prices, 5 to 10 point reactions and rallies, lasting in all from one to four months, until the judgment of the spectator is confused and beclouded.

The time to sell, to harvest one's profits, and to retire from securities until another buying opportunity presents itself, is of course when an important advance in prices is about to culminate; and the present chapter aims to deal with the broad considerations, concerning this branch of the general subject. Fortunately, signs of approaching culmination of such gigantic and protracted upheavals in the stock market as occurred in 1864, 1881, 1890, 1901, 1902, 1906 and 1909 are never lacking. There is also a basis for judgment, even with reference to the less conspicuous upward swings in prices.

Apropos of the time to sell, Rothschild's maxim is full of wisdom for investors and long pull speculators and is worth repeating. Having finally accumulated an enormous fortune, that brilliant financier declared that he had gained it by "never buying at the bottom and never selling at the top." He knew when conditions promised, broadly, a future rise or decline, and that was enough for him. It ought to be enough for anybody. After a long rise, Mr. Rothschild, having gained a handsome addition to his fortune, began to look for clouds on the distant horizon, and when they appeared and the barometer began to fall, he made haste to "sell his first" before other people were alarmed. He was always safe and never failed to promote the fortunes of himself and his house.

This is also the principle followed by the numerous profitable investment companies in Holland, whose dividends are so fat. Among these concerns, American securities are a favorite (they fluctuate so widely). The Dutch are absolutely dispassionate, cool in temperament, and level headed as to their purchases and sales. They never try for the last dollar of profits; they make it their business to get out in time.

However, every American wishes to gain as large a part as possible of every important advance, and not to sell until it is really compulsory to do so, all things considered. It is therefore convenient to know under what circumstances it becomes imperative to sell.

In a general way, the considerations which govern the time to sell are exactly the reverse of those which indicate the propriety of buying, but there are certain other elements of the matter, which make a detailed review of the subject proper. Warnings as to the necessity of liquidation are to be expected from:

1. Income yield of stocks.
2. Volume of transactions at the big Exchange in New York.
3. Action of the market itself.
4. Banking conditions and money rates.
5. Other conditions.

These five considerations supply a scientific basis and sufficient evidence as to the propriety of liquidation of investment and speculative accounts, in ample time to conserve both capital and profits. Some of them are as definite in their indications of the coming of trouble, as the ancient beacon fires on the New England hills were of the stealthy approach of the Indians.

While the owner of securities must always be attentive, he need not be in undue haste. He must consider first of all the stage of the Cycle through which the country is passing and the probability of the stately upward movement lasting for years, as it did after 1861, 1865, 1877, 1884, 1894 and 1907. He should decide how much is left of the one to three years rise. He must also determine whether to wait for the end of the major swing in prices in the first and third quarters of a Cycle or to take advantage of the normal yearly turn. It is safer, as a rule, to take 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 and failure of institutions. Impending crop failure is a tremendously bearish argument, as witness the serious reaction in the Summer of 1901 in consequence of the partial destruction of corn by parching winds and hot weather. Witness also the way that small crops added to the depressing influences of 1903 and 1911. On the other hand, great crops, like those of 1905, 1906, 1909 and 1912, add value to securities and inspire a rise in market prices. Size of the crops is merely an annual influence. Good crops are discounted by a Fall rise, and poor ones by a mid-Summer reaction. Prospective changes in the tariff laws are worth attention.

It is a task of exceptional difficulty for the private individual to judge when to get out of a particular stock from the point of view of earnings and dividends alone. Insiders are apprised of the trend of earnings, of the difficulties and competition which confront them, and the rocks ahead, long before the public are notified of the facts. They may maintain the dividend, for a speculative purpose, but insiders begin to sell long ahead of the crowd. A mysterious and protracted decline against the course of the general market, such as befell Amalgamated Copper in 1901, or Texas Company in the early part of 1910, or a failure to rise proportionately with other stocks in a bull market, is a sign of weakness in earnings or other financial difficulties, but it is seldom that outsiders know the facts in time to sell to advantage. Unaccountable heaviness in the price of a particular stock demands instant attention, however, and usually sale, even at some loss, before it is too late.

Chart indications are of the utmost importance. See "Trading Markets."

Bad banking conditions can never be corrected normally, except by the calling upon speculators and others to return to the banks the money, which they have borrowed and for which they have pledged their stocks as collateral security. Unless the money can be borrowed from other institutions, in town or out, or in Europe, the securities must be sold forthwith, to obtain the cash for repayment of the loans. Compulsory liquidation of speculative accounts, owing to the calling of loans, puts a sharp, effective and sudden end to a bull campaign. This is what was the matter in 1902, 1906 and finally in 1909, and will always be the matter when bank resources are seriously strained. When banking conditions are bad, the time has come to sell securities.

Range of prices for several years preceding will often supply a clue to the time to sell. When far above its normal range of prices, it is usually better to throw a stock on the market.

Culminations are often denoted by the fact that rallies do not hold. When this symptom appears, the market is technically weak.

Bullishness at fever heat, a state of mind for which the manipulative element have steadfastly labored for purposes of their own, is another token of the time to sell. Too much good news is always acted upon for sales by many wise old timers, who have made a lot of money in the stock market.

A cool-headed investor will reason over the whole 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, close to 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 mending. No signs of trouble were visible in the financial 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.

After Union Pacific's dividend was raised to 10 per cent, the shares sold as high as $219 in 1909, then yielding only 4.55 per cent on the investment. Two hundred and nineteen was the highest quotation on record. Conditions of that time were so plainly an imperative order to sell, that no one need have been in the slightest doubt as to what to do with his holdings of this fine old stock.

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 figures, 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 $125⅜.

The 1909 episode in United States Steel, common, supplied evidence of the time to sell. The corporation's "open war in the steel trade" in February, 1909, led Pittsburgh, Chicago and London to go heavily short of the Steel shares. Unexpectedly to the bear operators, the lower prices for iron and steel products led to a great expansion of the business; and against the short interest, United States Steel, common, was forced from 41½ in February to 94⅞ in October. The dividend was then 3 per cent; and while a larger disbursement was in prospect, the stock was certainly too high to hold at 94⅞. Thousands of holders hastened very properly to get out and United States Steel, common, could have been bought, next year, as low as 61⅛.

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 3½ 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 $198¾. 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, the stock would have paid only 3½ 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, Wall 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 presaged 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 fall which was never seriously interrupted until September, 1903, when the stock 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, the bull "tips," the cloud of higher dividends, and the rumors which fill the air, when a bull market is approaching culmination. Hotel lobbies, the clubs, the popular restaurants and the newspapers are full of tales, most of them grossly exaggerated, in which scores 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. Many shrewd and successful private owners of securities make it an invariable rule to get out of stocks, the moment a great rise in the market becomes a first page feature in the daily sheets. 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 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 delay 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 from July to October.

A CODE OF RULES

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

1.—In any event, sell, after a powerful rise, and when all the news is good, but 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, unless there is something seriously wrong with its finances!

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

7.—Never sell during a transient 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.—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.

10.—When selling, after sound consideration, it is usually best to sell "at market price," without striving for some particular figure! In nine cases out of ten, the latter effort meets with disappointment.

11.—Finally, do not go in again, after being once out! This is an old and sound rule.

XVII

A CORRECT SYSTEM IN INVESTMENT AND SPECULATION

THE PROPER PLAN FOR AN INVESTOR AND LONG PULL TRADER.—KNOWLEDGE, JUDGMENT, A FIRM WILL, AND COMMON SENSE, THE PRINCIPAL GUIDES, BUT A CHART USEFUL AS AN AUXILIARY

IT will be proper to terminate this discussion with a recapitulation and summing up, even at the risk of some repetition.

A correct system for both the investor and for him who engages in legitimate long pull speculation must necessarily be based on an intimate knowledge of the painstaking and successful methods, followed by those who have attained a competence and by those others who have amassed fortune, through the agency of security investments. A race of teachers of efficiency has arisen in these latter days, whose motto it is, that all the desirable things of life are within the reach of every man, who will adopt the proper rules for guidance and who will train his mind and will to follow those rules implicitly and to the end. In no department of activity are correct rules and the power of will to obey them more essential to success than in the matter of security investments.

A system connotes methods of procedure, calculated to attain the object in view. Once adopted, a proper system must be followed courageously and to the limit. If the system has not been entirely perfected, if once in a while it fails to bring the utmost possible benefits, it should by no means be abandoned. It should be amended in the light of one's own experience. A careful review of the motives and considerations, which led to a specific purchase or sale, and the reasons why that action proved unsatisfactory, will tend to correct any slight fault in methods and lead to a perfection of one's system. The importance of adopting a definite plan of action will become manifest, as soon as one realizes that when the great buying and selling opportunities arrive, every effort will be made by predatory interests to confuse the public mind, to blind the generality as to what is actually going on, and to cause individual investors and traders to distrust their own judgment. In such cases, there is no safety except adherence to a tried and tested system, which will protect a man against his own doubts and enable him to navigate safely through the fog which chokes and conceals the long view ahead.

While human beings are divided with respect to security investments into two classes, investors and long pull traders, yet the correct procedure for each in its salient features is precisely the same. The trader, however, operates for profit only and customarily on a margin; and he must take certain precautions, which the man who has paid for his securities in full may ignore.

FOR HIM WHO BUYS BONDS ONLY

For the capitalist who will have nothing except bonds, little can be set forth in the nature of a system, although suggestions may be useful.

If the investor intends to hold all his bonds until maturity, or until some vague period in the future when they have risen in value above his purchase price, no other system is required for him, except that he should never buy a non-convertible bond, no matter how attractive is the prospectus, when it sells above par or yields an income smaller than its rate of interest. If he pays a premium for the bond, then his net income until maturity is cut down just so much. To conserve income and to ensure safety of capital, bonds should be bought only during or after a great Panic and before the market starts up, as in 1903, 1907, and 1915. The charts of course of the bond market on other pages of this book will indicate that fact, clearly, to the most heedless investor. Per contra, it is the lesson of experience, that ordinary bonds should be sold, whenever a rise in price affords to their owners the equivalent of from one to three years' interest. Safety of capital must be kept in view, peremptorily.

Bonds, bought to gain an income better than the low rate of interest paid by a trust company, while the owner of capital is out of stocks, or when his regular business falls dull, seldom prove remunerative and have often proved extremely embarrassing. If the capital is required later, for business purposes, the bonds are generally sold at a loss.

It is also the lesson of experience, that bonds, bought when they are first issued and advertised, deteriorate in value afterward. Financial precedent is definite on this point. It may minister to a man's pleasure to enter a great banking or bond house, where he will be received with the most polite attention, and pay for a block of new bonds which are being floated at the time. New bonds are never sold at panic prices. They are never offered at the bottom range of their class. They are issued during a boom in stocks and at top market prices. They can invariably be bought, later, at a price equal to the saving of the interest for two or more years. The least of the dangers, to which the too enthusiastic investor in a new bond issue is exposed, is that his capital will be locked up in bonds indefinitely, so that it cannot be released for any other and more remunerative employment.

Convertible bonds of sound corporations are an excellent purchase in times of depression, because they are certain to advance in value later, thus making safe the capital invested. They should be sold, invariably, whenever a bull market in stocks becomes fast and furious, because they are doomed to decline soon afterward.

The bonds of corporations, which are near the verge of bankruptcy, are often tempting from the point of view of price. In this case, the investor needs an exact knowledge of the true financial status and prospects of the corporation, and especially should he know without cavil the stage of the Cycle through which the country is passing. If a Cycle is just beginning, and if a revival of trade and transportation promises escape from bankruptcy for the corporation, then these low priced and temporarily discredited bonds often prove satisfactory investments.

State and other public bonds, which are exempt from income tax, are now a desirable investment, but should never be bought in a hurry or during a boom in stocks, for the same reasons which apply in the case of corporation issues.

The bond business has been overdone; and the trend of investment sentiment, both in this country and Europe, is now toward sound, old and seasoned common stocks, preferred stocks and short term notes.

FOR THE INVESTOR IN STOCKS

Stocks are more mercurial than bonds. Not one of even the soundest of them fails to have a considerable movement in price, every year, in response to demand, supply and speculation, there being speculation in all of them. To protect his own interest, to safeguard the original capital invested in them, and certainly as a means of adding a desirable increment to fortune, it is absolutely essential that even the most conservative investor, the man who abhors speculation, must sell his holdings from time to time and repurchase them on proper occasions. It is quite practicable to set forth a correct system for transactions in stocks, condensed from the preceding pages of this book.

1. A man who proposes to manage his own investments must positively be prepared to undergo whatever labor is involved in keeping himself informed as to fundamental conditions: the part of a Cycle, through which the country is passing; earnings and prospects of the corporation, in which he is interested; and above all other things, what money is going to be worth six months or a year ahead. If he is not competent, or is unwilling, to perform this labor, he would do well to turn his fortune over to a trust or security company, or be governed in his transactions by a competent financial adviser, and let harder working men manage affairs for him. The study of all the various factors which influence the value of securities is, however, most fascinating, and should prove a great pleasure to a healthy mind. Even if the study involves a little drudgery, it should be persisted in to such an extent, that the man who manages his own investments actually *knows* that his stocks and bonds are sound and well bought, and knows it so well, that if his investments are disputed, he can convince the other man. The investor may properly consult financial authorities, but he will be in a more independent position if he can study the matter himself

and make up his own mind. Knowledge is wealth and safety in security matters, and "from many a blunder it will free us, and foolish notion." The first principle is to understand conditions and their trend thoroughly.

2. The next principle is to know when to buy. To this end, it is essential to look up the history of every stock and know its extreme range of price, in periods of low money and high money, and in booms and panics. How many investors govern themselves by an investigation of that character? Not one in a thousand! The majority buy, at any price, on anybody's suggestion, or in response to a beautifully printed prospectus, issued by a banker, and without the slightest reference to where the general market stands, at the time, or the direction toward which the statues in the financial Alhambra point. That is about as unscientific a proceeding as can be imagined. A sound system for investment in securities of any kind provides that a man should buy, only when the securities have fallen in price approximately to or below the level, at which they have theretofore always been a speculative purchase for a substantial rise. Consult Chapter XV, on "When to Buy." Naturally, this will often involve waiting for important reactions. But it is the plan followed by the great insiders and really successful investors. It is the only way to safeguard the principal of an investment. There were untold millions put into bonds and stocks in the fortunate years of 1905 and 1906, which will never come back to their possessors, simply because the securities were bought at the upper range of values, not at the lower, that upper range being at an extraordinarily high level, which has not since been seen and in some cases never will be seen again. When a man buys at the lower range of prices, his capital is safe and a pleasing profit will accrue thereon, in due time.

It is admitted without the slightest diffidence, that if the whole investment world had acted upon the principle here set forth, and had refused to touch new issues of railroad bonds and stocks, until the prices of them had been slashed to a panic level, then thousands of miles of railroads in the United States and hundreds of factories would never have been built, when they were built. Settlement and civilization would never have advanced with such gigantic strides;

and the United States would be far more backward than it is to-day. This does not alter the fact one iota, that private investors have lost millions of money by their heedless purchase of security issues, at too high a price, and that the only way to safeguard private fortune, invested in securities, is to wait until securities have fallen approximately to, or below, the low range in price, customary in panics or great reactions. The great insiders never buy the ordinary run of stocks, for investment, until they can do so on a 5 to 7 per cent income basis. This refers to stocks paying from 4 to 10 per cent.

3. A correct system for an investor implies the sale of all his securities, when they approach the upper range of their normal price swings or rise above that range. In experience, this is the hardest duty for a conservative investor to discharge. Consult Chapter XVI, on "When to Sell," and the third paragraph of this chapter. The rush of prosperity, the enormous earnings of railroads and business corporations, the enthusiastic optimism which reigns on every hand, the larger dividends, and the arts of insiders who are anxious to sell out their speculative holdings to the public, blind the owners of securities at the top of a boom to the importance of getting out of everything they have, when they ought to do so. Yet financial history is full of proofs of the assertion (and the years 1912 to 1914 were particularly rich in examples), that no man can feel assured, when a valuable security begins to decline in price, that it will recover for many years afterward. Perhaps, it never will without an assessment on the stockholders. This argument alone, coupled with the misfortunes of the New York, New Haven & Hartford Railroad, the Boston & Maine, Missouri Pacific, Wabash, and a large number of other railroads, which have in the past gone into bankruptcy or have been saved therefrom only through suspension of dividends and reduction of capitalizations, should be sufficient to enforce the lesson, that securities should be sold by even the most conservative investor in the height of a business boom. And certainly, the man who desires to add to his fortune by security transactions has no other recourse. The great insiders sell when stocks have risen so high, that income yield at going prices is from 3 to 4 per cent.

4. The bulk of an investor's fortune should invariably be invested only in sound and seasoned securities, which are listed at one or

more of the established exchanges, and in which dealings are more or less active. An inactive stock or bond can be sold only at a material concession in price. It can be bought only at a price considerably higher than the last quotations. It is important to have a ready market for securities which are to be sold. Active securities farthermore supply by their fluctuations a useful indication as to their true market value in alternating good and bad years. It is the extreme of imprudence for an investor to commit the bulk of his capital to new and untried securities.

5. An investor with large interests in particular stocks will be supplied, automatically, with a valuable clue as to the great buying and selling opportunities, by keeping a chart of the daily price movements of his stocks, or by having an employé keep one for him. Keeping a chart does not transform him into a speculator. The trouble involved is small. On the other hand, a chart of high and low by days throws a constant light upon the trend of the market and aids immensely to detect the final turning point for the rise or fall. After a long and strong rise, when prices break below the trend, the investor must thereafter pay close attention to the market. When prices have risen finally to a new high and have broken under the trend for the third time, culmination of the rise is denoted. Is it not worth while to have a compass, a system, to guide one at such a time, as a means of resolving one's doubts and as a valuable auxiliary to the judgment?

6. The investor hardly needs to hold any part of his capital in reserve, when the time has come to buy. In a panic period, or at the bottom of a great reaction, all securities do not necessarily reach their lowest prices on the same day. Some sound security may suddenly weaken, subsequently to actual culmination of the market in general, in consequence of belated liquidation of some large speculative marginal account, affording a tempting opportunity for investors. But, as a rule, it is better to invest all the capital at once, and make the most of a great opportunity, even if a small opportunity should be lost. Nor is it sensible to put in part of the capital at the approximate bottom, and embark the rest only after a substantial recovery has set in. The money goes farther in making purchases, before there has been any recovery.

7. When either buying or selling, go in boldly and have your broker execute your order "at market price." More opportunities are lost than are improved by haggling for a specific price. The big men never haggle over fractions of a dollar and seldom over whole dollars in the price. Remember Rothschild's maxim that fortune is gained by never buying at the bottom or selling at the top.

8. The most difficult and delicate question for an investor is what to do with funds, which become available when prices are part way up. Shall he invest at once or wait for a reaction? It is the opinion of the best authorities, that he should wait for a reaction, and that whatever he does, purchases made part way up from a previous low bottom should always be considered as a speculation and dealt with on that basis. They at any rate ought to be sold, on any farther rise and on the slightest appearance of doubt or trouble. It is the lesson of experience.

THE investor who follows these rules should make from 30 to 50 per cent a year on his investments in securities.

FOR THE LONG PULL TRADER

FUNDAMENTALLY, the trader, engaged in legitimate speculation, must know as much and be governed by precisely the same rules of action as the investor. Starting then with the same fund of general information as the investor and guided by the same principles in buying and selling, the trader needs to add to his rules for action merely those other things, which are imperative by reason of conducting his operations upon a margin.

1. The trader should never, under any circumstances, place his whole capital at risk, on any margin too small to cover extreme possibilities. If prices are at the usual low range, where investment begins, look back to the low price of your stock in the last previous panic, and estimate how much margin is required to make you perfectly safe, and act accordingly! No one should grumble at such a conservative piece of advice. A big margin at the start is of inestimable value. It permits the trader to take on more stock, if the

market has a farther dip, or after the long upward swing has begun. It is of the highest importance to start right and to be safe in the speculation. Some sudden change in affairs, some new development, may interrupt the broad upward or downward trend of the market long enough to prove a costly experience for the small-margin trader, an incident of no material importance to an investor. Thus, large margins are essential. The higher the market has risen since the last panic or bottom, the larger the margin which will be safe. In these modern times, the proper margin on stocks worth around par is from $30 to $40 a share. Half the face value would be safer yet. On wild denominations, like the war stocks of 1915, anything less than from $50 to $75 margin would have cost the stubborn speculator all of the capital he had put at risk, unless he had bought at the actual bottom of prices. It is always well, in any case, for the trader to maintain a surplus of margin with the broker. This will enable him to take advantage of the occasional opportunity, presented by some other stock; and a position of entire safety with regard to margins ensures freedom from anxiety, and ability to form a dispassionate judgment. The man who tries to get rich slow, not quick, will get rich all the quicker.

2. Wait until one's initial purchase can be made to distinct advantage! In the course of a series of years, this caution will pay handsomely. Then, use a really protective margin! Natural forces and manipulation by big operators will do the rest.

3. Since securities are being bought for the long pull, those which pay dividends are preëminently the best, because they pay carrying charges on the stocks. Interest on non-dividend payers mounts up so rapidly that it seldom pays to buy this class of stocks except for a comparatively quick turn.

4. The trader should never place a stop order, on stocks scientifically and properly bought. He should use margins instead. To any man of experience, this suggestion will commend itself as entirely reasonable. Stop orders find their proper employment in protecting profits, not capital. Stop orders both on purchases and short sales are imperative, when a trading market hints at culmination of a long move.

5. A few minor rules have been crystallized from the experience of years:

Do not cast away discretion and judgment, after a few successful trades, and do not increase quantities then or operate on smaller margins! Restrict, rather than expand, operations!

Having had sound reasons for selling, after a long rise, the only logical course is to reverse one's position on the market and sell short. The same rule applies to covering short stock after a long decline. Do not sell short again, but reverse your position!

Never act upon a tip! Insiders distribute tips for their own advantage, not for that of others.

Follow public sentiment until Wall Street is practically unanimously bullish or bearish! Then turn boldly to the other side of speculation!

Unless in a position to protect a trade against extreme possibilities, it is a good rule not to trade at all.

Never buy or sell, unless there are logical reasons for believing that the price is low or high enough for that purpose, all things considered! But if the trader will buy and will sell, when these reasons come to hand, he will add to his possessions from year to year.

On declines, buy the best stocks! On advances, sell short the worst ones!

It is so definitely known to every stockbroker that out of every 1,000 men who have lost money in speculation, fully 900 of them have been quick traders, that one lacks the heart to try to give to this class of people any advice whatever, except the famous one of London *Punch:* "Don't." There is little in quick trading except for a gifted few.

There is no reason why the long pull trader, acting in accordance with the system above set forth, should not make a fortune in the course of a series of years, no matter how small his beginning. But he must positively obey the rules of the game.

XVIII

MAXIMS OF WALL STREET

A GOOD investment is a good speculation, and if it is not a good speculation, it is not even a safe investment.

Actual value will tell in the end.

No man ever makes himself poor by taking profits.

The dog which snaps the quickest gets the bone.—*Daniel Drew.*

An insider's position is as good as money in the chest.

The market is made by the minds of men. What the minds of men have made, your mind can solve. The problem requires study, practice, experiment, persistence and *unlimited* patience.—*Wyckoff.*

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 and the public are with him.

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

The market will be herc to-morrow.

Business is a scramble for the cash. Nobody looks for manners around the meal tub.—*Daniel Drew.*

Cut your losses short and let your profits run!

Always have some resources free for bargains!

Values may and do foreshadow higher or lower prices, but manipulation is necessary to realize them.

All things come to him who waits.

The opportunity of a lifetime must be improved during the lifetime of the opportunity.

No grist can be ground with water which has run past the mill.

Look before you leap; but he who never acts never makes.

The public usually buys at the top and sells at the bottom.

Prices always look strongest at the top and weakest at the bottom.

The man who is right six times out of ten will make his fortune. —*James R. Keene.*

Those who can give good advice are least anxious to.

Make up your mind how much profit can reasonably be expected; when your figure is reached, sell; and *do 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 fortune, you will probably not even make your living. If you go there to make your living, you may make your fortune.—*S. V. White.*

Buy privately, but you may sell publicly if you will!

In buying stocks, select those whose earning power, and thus their actual value, is above the price.

No one is always right, but successful men are more often right than wrong.

Wall Street advice is free and is worth it.—*Thomas W. Lawson.*

A man's learning dies with him; even his virtues fade out of remembrance; but the dividends on the stocks he bequeaths to his children live and keep his memory green.—*Oliver Wendell Holmes.*

If you intend to sell on the next rise, buy by preference 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 upward!

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.

He who sells what isn't his'n must buy it back or go to prison.

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.*

Winds blow hard on high hills.

Never be a bear on the United States. If you do, you will go broke.—*J. P. Morgan.*

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!

Ample and accurate information is the first step toward success. —*J. J. Hill.*

The secret of wealth: Never sell stocks at the top and never buy at the bottom. In other words, never wait for the extremes of the market.—*Baron Rothschild.*

Everybody is bigger than anybody.—*Jay Gould.*

When the public really starts to buy, the work of several hundred insiders who are trying to sell is of no avail in putting the market down.

An aphorism, with which, however, the author differs: "Statistics are post-mortems. They are no guide to what the next statistics will be. Opinions of future values, based upon past statistics, are naturally valueless."—*George Stuart Smith.*

XIX

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 next day, as they are in New York, 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. In Paris and Berlin, settlements are made once a month.

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 in New York devote themselves to arbitrage transactions between that city and London.

Averaging.—To buy every point or 2 points or so down, in a falling market, or at the bottom of a strong decline, or to sell short on a similar scale up, or near the top of a rise, in a rising market. The object is to make total transactions average a satisfactory and safe figure.

Bank Reserves.—See "Reserves."

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 established exchange. The concern accepts orders for the sale or purchase of stocks, but usually 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. Bucket shops are, as a rule, located in the smaller cities of the country, one in each place, and a group of them belong to, or are controlled by, certain individuals in New York. It is asserted that when the bucket shops of the country are loaded with orders for long stock for their customers, the manager in New York engineers a raid upon the market, with a view to wiping out customers' accounts and pocketing the money, and that the manager of a bucket shop who does not so mislead his customers as to despoil them of their margins, is promptly discharged.

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 from $50 to $100, for the "call." Practically, the transaction is a bet between the parties as to the future course of the stock. A group of street brokers in New York devote themselves entirely to the sale of calls, puts and straddles. They are all classed under the general head of "privileges." The utmost that a man can lose on a call is what he paid for it.

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, or wishes to distract attention from the actual distribution of pool holdings to the public.

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 representative of each other bank, gathered in a large room and seated at desks supplied for the purpose, the checks against it. 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. It is the Clearing House which publishes the weekly statement, showing the condition 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. During the panic of 1907, small Clearing House certificates were circulated in a few cities in this country, in lieu of national bank or other currency.

Coal Roads.—The railroad lines leading from the anthracite coal mines of Pennsylvania, either to the seaboard or the interior. These roads formerly owned in fee simple enormously valuable anthracite coal mines; and one of the motives which inspired construction of the lines was to create an outlet to market for the coal. The mines were operated by the railroad companies themselves, until the famous "commodities clause" was introduced into the inter-State commerce laws, June 29, 1906, which forbade railroads to transport coal mined and owned by themselves. May 3, 1909, the United States Supreme Court upheld this law; and, as a consequence, the coal roads have since 1909 dispossessed themselves of their coal properties by creating corporations to own them, the shares of these corporations having been distributed among the stockholders of the respective railroads.

Commission.—A broker's charge for the sale or purchase of securities. It amounts to $\frac{1}{8}$ 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. Many others have been attempted but failed. Several of the extraordinarily high prices, recorded in 1864, were due to corners. Commodore Vanderbilt managed one of them in 1864 by buying up the whole floating supply of Harlem Railroad shares, forcing them from 86⅛ in January to 285 in June. Another corner of 1864, which collapsed, was that in Pittsburgh, Fort Wayne & Chicago, which rose from 82¾ in January to 152¾ in April and then suddenly and disastrously slumped to 87, a few months later. In 1872, there were several corners, the most conspicuous being that in Chicago & Northwestern, which was steadily bought until it had risen from 51½ in October, 1871, to 230 in November, 1872. A notable corner was that in Northern Pacific in 1901 as a result of competitive buying by rival interests, which forced the price from $77¼ in January to $700 a share in May, and to $1,000 in a few private settlements. The rules of the New York Stock Exchange are now so framed as to discourage corners of a speculative character in stocks. They upset the stock market and inflict great losses on the public.

Covering.—The repurchasing 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.

Federal Reserve Banks.—The Federal Reserve law was enacted December 23, 1913, and the new banking system went into full operation in November, 1914. The United States was divided into twelve reserve districts, and all national banks were required to subscribe a sum equal to one-sixth of their respective capital and surplus to the stock of Federal Reserve banks of their respective districts. The amount of reserve to be held against deposits was reduced, thus freeing an enormous amount of legal tender money for use in loans to merchants and other borrowers of money. Provision was made for the issue of emergency currency. It is supposed by the authors of the law, that panics will hereafter be rendered almost impossible, or at any rate that they will not be due to monetary stringency. The Federal Reserve system originated, in effect, with the Monetary Commission of which Senator Aldrich of Rhode Island was chairman, but was enacted finally by the political opponents of the party to which Mr. Aldrich belonged.

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 in normal years. Whether exchange is high or low is of great importance to the financial world. When it is high, the tendency is toward exports of gold. We have been buying more foreign goods or a larger quantity of American securities, held abroad, 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.

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, Great Northern, Chicago & Northwestern, Northern Pacific, St. Paul, Rock Island, Alton, and Union Pacific roads.

Holding the Bag.—Taking all the shares of any particular stock which are offered for sale, without bidding for them. It signifies either (1) quiet accumulation by pools, syndicates and private banking interests at the conclusion of a substantial decline; or (2) an unwilling taking of the shares by strong interests in order to prevent an utter collapse in the market, in a time of alarm or panic. Stock thus purchased to support the market is often peddled out again when the scare is ended.

Kaffirs.—A name used in London to designate South African gold mining shares. A famous boom occurred in Kaffirs in London in 1895, which collapsed in October and November, inflicting enormous losses upon the public.

Lamb.—The novice in stocks, the credulous and inexperienced upon whom the unscrupulous prey. Sometimes called, in the cynical parlance of Wall Street, the "sucker." George Stuart Smith calls him the man who is wholly ignorant of when the insiders have sold out.

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 slide. 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 entirely prevented. The art of manipulation has other features, among them the setting afloat of rumors and publication of news, calculated to aid the result desired by the operator. During periods of accumulation little is heard in Wall Street except depressing news. In a period of distribution, scarcely anything is heard except the most inspiring news.

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 dollars a share was formerly the customary margin and is so yet on low priced shares. But the hazards of speculation have taught traders at last to employ margins of from \$20 to \$30 a share; and, on issues subject to wild manipulation and wide fluctuations, from \$40 to \$75 a share. The stocks, bought for the customer of a commission house, must, however, be paid for in full, and the broker does that out of money he has borrowed from the banks on time or call loans. A few active speculators, with great resources and backed by powerful interests, have in the past arranged 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.

Moratorium.—A legal enactment, resorted to only in times of great financial stress, whereby the payment of certain debts, or all debts, by the people of a country is postponed for a period of months. Upon the outbreak of general war in Europe in 1914, nearly all the principal states in Europe declared moratoriums, including England, France, Russia, Norway and Sweden, Denmark, Bulgaria, Turkey, Switzerland, and Italy. Moratoriums were also declared in Brazil, Uruguay, Ecuador and China.

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; ½ point, half a dollar a share; and so on.

Pool.—An association of 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 them, 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 the stock to its signer, within a time and at a price named. The buyer pays a certain sum for the privilege, perhaps $50, perhaps $100. A "put" is only one form of betting that a stock will, or will not, decline in price. In any case, if the buyer of a privilege loses, his entire loss is limited to the amount paid for the privilege. Russell Sage was, in his time, one of the foremost dealers in puts and calls; but the business is now practically confined to a group of open air brokers, who meet their clients in New Street, New York city.

Pyramiding.—A dangerous, but, when successful, a highly profitable speculative practice. A trader buys 100 shares of stock, for instance, on a 10 point margin (or he can pay for it outright). The stock advances 10 dollars a share in price and the trader's profit would be 10 dollars a share, if he should sell. But, employing the paper profit of 10 dollars a share as margin, he buys another 100 shares. Again, there is an advance of 10 dollars more a share. Then the trader employs the paper profit on his 200 shares to double up and buy 200 more. This process is repeated until the market is near culmination. The trader would then have, after a 40 point advance, 1,600 shares of stock, all carried on the original 10 per cent cash margin. If he sold after a 50 point advance, he would have a profit of $31,000 on the total transaction. The danger of this form of pyramid inheres in the fact, that a 10 point reaction at any stage of the advance would utterly destroy all the trader's paper profits and his original 10 point margin as well. A market, or a stock, which is full of speculative pyramids fairly invites the thunderbolt, because it is for the interest of the managers of a bull campaign to smash the pyramids when they can. Many of the mysterious and unexplained 10 to 15 point reactions in the stock market are due to the deliberate toppling over of pyramids by the pools. A safer pyramid is to buy only 100 shares at a time on the way up. In that case, the margin grows larger the more the stock advances. The reader can figure this out for himself. Pyramiding on short sales is carried on, on precisely the same basis as pyramiding on the way up.

Reserves.—The banking laws of the United States require that all national banks shall maintain a reserve against deposits, most of it in their own vaults, part of it in the Federal Reserve Banks of their respective districts, consisting of gold coin, gold certificates, silver coin, silver certificates, "greenbacks" or United States legal tender notes, and clearing house certificates which are payable in gold or legal tender. In central reserve cities, the reserve must be equal to 15 per cent of the aggregate demand deposits (deposits which are payable within thirty days) and 5 per cent of demand deposits (which are not payable within thirty days). In reserve cities, the amount of reserve is 15 and 5 per cent. In all other cities 12 and 5 per cent. Formerly, the large cities were required to maintain a reserve of 25 per cent on all deposits and the smaller cities 15 per cent. When reserves fall below the legal limit, a bank can loan no more money.

Short.—To be short of stocks is to have sold them for a fall. The trader has sold his long stock and now "goes short." He orders the sale of a certain number of shares short and his broker disposes of them at ruling prices. The broker must deliver the shares thus sold. He therefore borrows them from some other commission house and pays for them in full with his own check. When short sales are covered, that is to say repurchased, the stock then bought is delivered to the house from which the original lot was borrowed. As the broker who loans the 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 pays no interest or only a nominal rate. The character of a short sale is not generally understood. Suppose that there are 1,000 shares only of a given stock. Each one is owned by somebody. The speculator who sells 10 shares of it short, not then being in physical possession of any of the stock, really creates 10 new and unauthorized shares of the stock; and those 10 new fictitious shares must eventually be retired by a covering of the short sale. He who is short of stock, when a dividend is paid thereon, is compelled to pay the amount of that dividend to the purchaser of his short stock. Commodities can be sold short, the same as stocks.

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 percentage 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 utterly 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." See "Manipulation."

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

XX

PRICE RANGE OF LEADING STOCKS

AN INSTRUCTIVE EXHIBIT OF THE CHANGES IN MARKET VALUE OF EIGHTY-FIVE PROMINENT STOCKS

THE high and low prices, by years, of 85 conspicuous stocks in the New York market are set forth on the following pages.

In accordance with rules, adopted by the New York Stock Exchange in 1915 and 1916, both the market value of all shares and the amount of all dividends are hereafter to be expressed in dollars per share. For many years, and indeed until on and after October 13, 1915, all the railroad half shares and several half share industrials like Pennsylvania, Lehigh Valley, Reading, Delaware, Lackawanna & Western, Long Island, and Westinghouse were quoted in New York at double price, as though their par value were $100. Dividends were specified also at their per cent upon par value. They were so quoted in previous editions of this book. In accordance with the new and more logical rules, the quotations and dividends in the following tables are set forth on the basis of dollars per share.

Inspection of these tables will indicate the extreme range of price in prominent shares from the bottom of panics to the top of the succeeding booms, and will thus supply security owners with a suggestion as to the amount of money to be made in long pull operations in stocks. The distance from the top of a boom to the bottom of the next serious depression will indicate to security owners the urgent necessity of selling even their soundest stocks, when bull markets are at or near their crest.

The comparatively low valuations in 1913–1915 of Union Pacific, Southern Pacific, Pennsylvania, United States Steel, preferred, Great Northern, Northern Pacific and other American issues, which have been owned by European investors upon an enormous scale, grew out of the persistent liquidation of those shares in the New York market, a liquidation which is yet in progress in 1916.

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Anaconda			Am. Car & Foundry			Am. Locomotive			Amer. Smelting			Amer. Tel. & Tel.		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892															
1893		Par $25, originally $50, after July 30, 1915													
1894															
1895															
1896															
1897															
1898															
1899	0	31½ Dec	70 Apl	0	10⅝ Dec	21⅞ May				0	30 Dec	59 Apr			
1900	0	37⅞ June	54⅞ Apl	1	12½ Jan	25⅜ Nov				0	34½ Jun	56½ Dec			
1901	0	28¼ Dec	54¼ Apl	1	19 Jan	35 June	0	22½ Aug	33⅞ Nov	0	38½ Oct	69 Apr	7½	157½ Nov	167¾ Sep
1902	1	20 Dec	36½ Feb	1	28¼ Apl	37⅝ Oct	0	23½ Dec	36⅞ Apl	0	37 Nov	49⅝ May	7½	160¾ Jan	186 Apr
1903	1	14½ Oct	31⅜ Feb	4	17¼ Nov	41¾ Jan	0	10½ Oct	31⅝ Feb	0	36¾ Oct	52⅞ Feb	7½	117¼ Oct	169 Feb
1904	1	15¼ Feb	30¼ Nov	1	16 May	35½ Dec	0	16⅛ Jan	36⅜ Nov	5	46 Feb	82½ Dec	7½	121 Feb	149½ Nov
1905	2	25¾ June	73¾ Dec	0	31 May	43⅝ Apl	0	33 Jan	76¼ Dec	5½	79¾ Jan	170⅜ Dec	7½	131 Dec	148½ Jan
1906	4⅞	56 July	75 Feb	0	32¾ July	47½ Jan	2½	53¾ May	78½ Jan	7	138½ May	174 Jan	7¾	130 July	144⅝ Jan
1907	6½	25⅛ Oct	75¾ Feb	3	24⅜ Oct	45¼ Jan	5	32¼ Nov	75¾ Feb	7½	58¼ Nov	155 Jan	8	88 Oct	133 Jan
1908	2	27½ Feb	50⅞ Dec	3	25½ Feb	50¾ Dec	3¾	31⅜ Feb	59 Nov	5	55½ Feb	107 Aug	8	101 Jan	132⅝ Nov
1909	2	37¾ Feb	54⅜ Dec	2	44¼ Feb	76½ Nov	0	49 Feb	69¼ Aug	4	77¾ Feb	105½ Nov	8	125 Feb	145⅛ Sep
1910	2	33½ July	54 Jan	2	39½ July	72⅞ Jan	0	29 July	62½ Jan	4	61⅜ Jul	104 Jan	8	126¾ July	143⅜ Feb
1911	2	29 Sept	41⅛ June	2	42⅜ Sep	58¼ July	0	32⅛ Oct	42¾ Feb	4	56⅝ Sep	83⅞ Jun	8	131½ Aug	153⅛ Jun
1912	2¼	34 Feb	48 Oct	2	49 Feb	63⅝ Sep	0	31¾ Mch	47½ Nov	4	66½ Dec	91 Sep	8	137⅝ Jan	149⅛ Mch
1913	3	30⅞ June	41½ Jan	2	36½ June	56⅜ Jan	0	27 June	44½ Jan	4	58½ Jun	74¾ Jan	8	110 Dec	140 Jan
1914	2½	24¼ Dec	38¼ Feb	2	42¼ Dec	53½ Feb	0	20¼ July	37¼ Jan	4	50¼ Jul	71⅛ Feb	8	114 July	124¼ Jan
1915	3	24¾ Feb	91⅝ Nov	2	40 Feb	98 Oct	0	19 Mch	74¾ Oct	4	56 Jan	108⅞ Dec	8	116 Jan	130¼ Nov

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	American Sugar			Atchison			Baltimore & Ohio			Bk. Rap. Transit			Baldwin Loco.		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892	10½	78½ Jan	114¾ Aug	0	32⅜ May	46⅝ Jan	3¾	92¼ Oct	101¼ Mch						
1893	21½	61¾ Jul	134¾ Feb	0	9½ Dec	36½ Jan	5	54½ Jul	97⅞ Jan						
1894	12	75⅝ Jan	114⅞ Aug	0	3 Jul	16 Apr	4½	58⅜ Dec	81½ Apr						
1895	12	86½ Jan	121⅝ Jun	0	3½ Jan	23⅝ Sep	0	32½ Dec	66¾ Sep						
1896	12	95 Aug	126⅜ Apr	0	8¼ Aug	18 Nov	0	10½ Sep	44 Jan	0	18 Aug	25⅛ Apr			
1897	12	109⅛ Mch	159½ Sep	0	9⅛ Apr	17 Sep	0	9 Jul	21⅛ Sep	0	18⅝ Jan	37⅝ Dec			
1898	12	107½ Mch	146⅞ Aug	0	10¼ Apr	19⅝ Dec	0	12⅜ Jan	72¾ Jan	0	35 Mch	78⅞ Dec			
1899	12	114½ Dec	182 Mch	0	17 May	24⅞ Feb	0	43⅞ Jun	61½ Apr	0	61 Dec	137 Apr			
1900	7¾	95¼ Mch	149 Dec	0	18⅝ Jan	48¾ Dec	2	55¼ Jan	89⅞ Apr	0	47⅛ Sep	88⅞ Dec			
1901	7	103⅛ Dec	153 Jun	3½	42¼ Jan	91 Jun	4	81¾ Jan	113 May	0	55⅞ Oct	88⅞ Apr			
1902	7	113 Nov	135⅛ Mch	4	74½ Jan	96⅝ Sep	4	92⅝ Dec	115¾ Aug	0	54¾ Nov	72⅜ Jul			
1903	7	107⅛ Oct	134⅜ Jun	4	54 Aug	89⅞ Jan	4	71⅝ Sep	104 Jan	0	29½ Sep	71⅛ Feb			
1904	7	122¼ Mch	153 Nov	4	64 Feb	89¼ Nov	4	72⅞ Mch	105¼ Dec	0	38 Feb	70½ Nov			
1905	7	130 May	154⅜ Dec	4	77⅝ May	93⅜ Mch	4½	100½ Jan	117 Aug	0	56⅞ May	91½ Nov			
1906	7	127½ May	157 Jan	4½	85⅜ May	110½ Sep	5½	105¾ May	125⅛ Sep	0	71 Jul	94⅛ Jan			
1907	7	92¾ Dec	137½ Feb	6	66⅜ Nov	108¼ Jan	6	75⅜ Nov	122 Jan	0	26¾ Nov	83⅝ Jan			
1908	7	98¾ Jan	137¾ Aug	5	66 Feb	101¼ Dec	6	76½ Feb	111⅞ Dec	0	37¼ Feb	69¾ Dec			
1909	7	115⅝ Nov	136⅜ Sep	5½	97⅞ Jan	125⅜ Oct	6	103½ Feb	122¼ Jul	3	67 Jan	82⅞ Jun			
1910	7	111⅛ Oct	127½ Feb	6	90¾ Jul	124⅛ Jan	6	100¼ Sep	119⅛ Jan	4½	68½ Feb	82⅜ May			
1911	7	112¼ Sep	122½ Feb	6	99⅞ Sep	116⅝ Jun	6	93½ Sep	109¾ Jul	5	72 Sep	84⅝ Jun			
1912	7	113½ Dec	133½ May	6	103¼ Feb	111¾ Oct	6	101¼ Feb	111⅞ Apr	5	76¾ Jan	94½ Jul	2	49 Dec	60¾ Aug
1913	7	99⅞ Dec	118 Jan	6	90¼ Nov	106⅜ Jan	6	90⅝ Jun	106⅜ Jan	5½	83¾ Jun	92¾ May	2	36½ Dec	53½ Jan
1914	7	97 Mch	109⅞ Jan	6	89½ Jul	100⅜ Jan	6	67 Dec	98⅜ Jan	6	79 Jul	94¼ Mch	2	38⅛ Jan	52⅛ Mch
1915	7	99½ Feb	119⅞ Nov	6	92½ Feb	111¼ Nov	5	63¾ Feb	96 Dec	6	83¼ Aug	93 Apr	1	26⅝ Mch	154⅛ Oct

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

	Bethlehem Steel			Bk. Union Gas			Canadian Pacific			Central of N. J.			Ches. & Ohio		
Years	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892							0	86 Oct	94½ Jan	7	111½ Jan	145 Feb	0	21⅜ Sep	28 Jan
1893							0	66 Jul	90¼ Jan	7	84 Jul	132¾ Jan	0	12½ Jul	26 Apr
1894							5	58 Dec	73½ Jan	7	87½ Dec	117¾ Mch	0	16 May	21⅞ Aug
1895							0	33 Mch	62¼ Sep	5	81½ Feb	116½ Sep	0	12½ Dec	23⅝ May
1896				6	75½ Aug	96 Nov	2½	52 Jan	62¾ May	5	87½ Aug	110 Nov	0	11 Aug	18½ Nov
1897				6	85 Jan	137 Sep	2½	46½ Mch	82 Dec	4	68¼ May	103¼ Jan	0	15⅝ Mch	27⅛ Aug
1898				6	106 Mch	140¼ Dec	4½	72 Apr	90½ Jan	4	84½ Nov	99 Dec	0	17¼ Mch	26⅜ Dec
1899				6	130 Dec	160 Mch	4	84⅝ Mch	99½ Mch	4¼	97 Jan	126⅜ Nov	1	23¾ May	31⅞ Dec
1900				7	140 Jan	183 Dec	5½	84¾ Sep	99¾ Feb	5	115 Jan	150½ Dec	1	24 Jun	42¾ Dec
1901				8	175 Jan	228 Apr	5	87 May	117½ May	5¾	145¾ Jan	196⅝ Dec	1	29 May	52⅝ May
1902				8	210 Jan	253 Aug	5	112¼ Jan	145¼ Sep	8	165 Nov	198 Jan	1	42⅝ Dec	57½ Sep
1903				8	170 Sep	225 Jan	5½	115⅝ Oct	138¾ Feb	8	153 Oct	190 Jan	1	27¼ Nov	53½ Jan
1904				9	185 Mch	229½ Oct	6	109½ Mch	135¾ Oct	8	154½ Feb	194¾ Nov	1	28¼ Mch	51 Nov
1905				9	175 Dec	215 Feb	6	130¾ Jan	177⅛ Sep	8	190 May	235 Oct	1	45½ May	59½ Sep
1906	0	17½ Oct	25¾ Jun	3	105½ Nov	178 Jan	6	155⅜ May	201½ Dec	8	204 May	239⅞ May	1	51½ Nov	65⅝ Aug
1907	0	8 Nov	20½ Jan	0	80 Oct	125 May	7	138 Nov	195½ Jan	8	144 Nov	220 Jan	1	23¼ Nov	56 Jan
1908	0	12 Jan	27¼ Nov	5½	85 Feb	152¼ Nov	7	140 Feb	180⅛ Nov	8	160 Feb	229 Dec	1	25½ Feb	59⅜ Dec
1909	0	18¾ Mch	36¼ Sep	6	118 Jan	164½ Dec	7	165 Mch	189⅜ Oct	10	215 Feb	323½ Sep	3	55⅝ Jan	91¼ Dec
1910	0	21 Jul	34⅞ Oct	6	125 Jul	164½ Jan	9½	176 Feb	202⅜ Nov	10	248 Jul	312 Jan	4¾	65 Aug	92 Jan
1911	0	26 Sep	38⅛ Aug	6	129 Sep	145½ Jun	9½	195⅝ Jan	247 Jul	12	260 Aug	320 Dec	5	68⅜ Sep	86¾ Feb
1912	0	27¾ Feb	51⅜ Oct	7	137½ Mch	149 Aug	10	226½ Mch	283 Aug	12	305 Jan	395 Apr	5	68¼ Feb	85¼ Oct
1913	0	25 Jun	41½ Jan	7	120 Oct	137⅞ Jan	10	204 Dec	266¾ Jan	12	280 Dec	362 Jan	4½	51⅛ Jul	80 Jan
1914	0	29½ Jan	46⅝ Dec	7	118 Dec	130 Jan	10	153 Dec	220½ Feb	12	300 Jul	315 Mch	3	40 Dec	68 Jan
1915	0	46¼ Jan	600 Oct	8	118 Jan	138¾ Oct	10	138 Jul	194 Nov	12	250 Sep	325 Jan	0	35⅝ Jul	64¾ Nov

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Central Leather Div $	Central Leather Low	Central Leather High	Chicago & Alton Div $	Chicago & Alton Low	Chicago & Alton High	Chic., Mil. & St. Paul Div $	Chic., Mil. & St. Paul Low	Chic., Mil. & St. Paul High	Ch. & No. Western Div $	Ch. & No. Western Low	Ch. & No. Western High	C., C., C. & St. Louis Div $	C., C., C. & St. Louis Low	C., C., C. & St. Louis High
1892				8	139½ Jan	154 Jul		75⅝ Apr	84⅝ Aug		110⅛ Dec	121⅞ Mch	3	57 Dec	75 Jan
1893				8	126 Aug	145½ Feb		46⅜ Jul	83½ Jan		84⅞ Jul	116⅜ Feb	3	25 Jul	60⅛ Jan
1894				8	130 Feb	146½ Nov		54¼ Jan	67⅜ Sep		96¼ Dec	110⅜ Jun	0	31 Jan	42 Aug
1895				8	145 Feb	170 Sep		53⅞ Mch	78⅞ Sep	5	87⅜ Mch	107½ Oct	0	28 Dec	50 Aug
1896				8	146 Aug	164 Nov	4	59⅞ Aug	80 Nov	5	85⅛ Aug	106¾ Apr	0	19½ Aug	39½ Feb
1897				7¼	147 Jul	170 Mch	5	69¼ Apr	102 Sep	5	101¾ Apr	132½ Sep	0	21½ Jun	41½ Sep
1898				7	150 Mch	172 Dec	5	83¼ Apr	120¾ Dec	5	113¼ Mch	143¼ Dec	0	25 Mch	47½ Aug
1899				7	168 Jan	175½ Mch	5	112 Dec	136⅛ Sep	6	141¼ Jan	173 Sep	0	42½ Jan	64⅜ Nov
1900				37	31 Oct	42 Dec	5	108½ Jun	148¼ Dec	6	150¼ Jun	172¾ Dec	3	50 Aug	76 Dec
1901				0	27 May	50½ Apr	6	134 May	188 May	6	168⅛ Jan	215 May	3½	73 May	101 Nov
1902				0	29½ Dec	45⅜ Jul	7	160½ Jan	198¾ Sep	7	204⅛ Jan	271 Apr	4	93 Nov	108⅜ Aug
1903				0	18½ Sep	37¼ Jan	7	133¼ Aug	183¼ Jan	7	153 Aug	224½ Jan	4	66 Aug	99⅜ Jan
1904				0	33 Jan	47¼ Nov	7	137⅛ Feb	177⅝ Dec	7	161⅛ Mch	214½ Dec	4	68½ May	93⅜ Dec
1905	0	41½ Jul	47⅛ Oct	0	30 Dec	44½ Mch	7	168⅛ May	187 Aug	7	190⅛ Jun	249 Jan	4	90 Jan	111 Mch
1906	0	33¾ Dec	49⅞ Jan	0	25 May	38¼ Jan	7	146½ Dec	199⅝ Dec	7	192 Apr	240 Jan	4	89 Dec	109⅞ Jan
1907	0	11⅞ Nov	40 Feb	0	8⅛ Nov	27½ Jan	7	93½ Nov	157½ Jan	7	126 Oct	205 Jan	4	48 Nov	92⅞ Jan
1908	0	15½ Feb	33 Dec	1	10 Feb	68⅞ Dec	7	103½ Jan	152½ Dec	7	135½ Jan	185½ Dec	1	47½ Jun	70½ Dec
1909	0	25½ Mch	51¾ Oct	4	57⅞ Feb	74¾ Apr	7	141 Feb	165⅛ Sep	7	173⅛ Feb	198½ Aug	2	68 Jan	83¼ Dec
1910	0	25¼ Jul	48¾ Jan	2	23⅞ Jul	66¾ Jan	7	113¾ Jun	158⅜ Jan	7	137¼ Jul	182½ Jan	2	61 Nov	92¼ Mch
1911	0	11⅞ Nov	40 Feb	0	15 Aug	31⅛ May	7	105¾ Oct	133½ Feb	7	138⅛ Sep	150 Feb	0	48⅛ Sep	66 Jan
1912	0	16½ Feb	33⅝ Sep	0	17 Jan	24¼ Apr	5	99⅜ Jul	117⅝ Nov	7	134⅛ Dec	145 Apr	0	45¼ Dec	62½ Apr
1913	0	17 Jun	30⅛ Feb	0	7½ Jun	18 Jan	5	96¾ Nov	116¼ Jan	7	123 Dec	138 Jan	0	34⅞ Aug	54 Jan
1914	2	25⅞ Jan	37⅜ Jun	0	8½ Apr	10 Feb	5	84¾ Dec	107⅛ Feb	7	122 Dec	136⅞ Feb	0	22 Jul	40 Jan
1915	3	32⅝ Feb	61¼ Nov	0	8¼ Dec	15¼ Aug	4½	77¾ Jul	101⅛ Dec	7	118½ Jul	135⅛ Nov	0	21 Jan	52 Oct

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Crucible Steel			Colo. Fuel			Consol. Gas			Corn Products, Pfd.			Delaware & Hudson		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892				0	28¼ May	43¾ Oct	6	102 Jan	128 Nov				7	122⅞ Jan	149½ Apr
1893				1¼	17¼ Aug	72 Feb	7½	108 Jul	144 Jan				7	102¾ Jul	139 Jan
1894				0	21 Jan	27½ Apr	8	111 Jul	140 Apr				7	119¾ Oct	144½ Apr
1895				0	20½ Dec	41½ Sep	8	126 Jan	161½ Dec				7	118 Dec	134⅞ Sep
1896				0	14⅝ Aug	34¼ Feb	8	133 Aug	168 Nov				7	114½ Aug	129⅝ Feb
1897				0	15¼ Jun	27⅞ Sep	8	136½ Jan	241½ Sep				5	99⅝ Apr	123 Sep
1898				0	17 Mch	32⅞ Dec	8	164 Oct	205½ Jun				5	93 Nov	114½ Feb
1899				0	30½ Feb	64 Sep	5½	163 Jun	223¼ Mch				5	106½ Jan	135½ Sep
1900	0	15	22⅝	0	29½ Jun	56½ Dec	6	164 Sep	201 Nov				5	106½ Sep	134½ Dec
1901	0	23	27⅞	3½	41¾ Jan	136½ Jun	8	187 Jan	238 May				7	105 May	185½ Apr
1902	0	21¾	24¼	3½	73¾ Aug	110½ Apr	8	205 Dec	230¾ Apr	3½	79⅝ Dec	90 Mch	7	153½ Nov	184½ Jan
1903	0	3¼	22	0	24 Nov	82½ Jan	8	164 Aug	222 Jan	7	60 Nov	85⅛ Jan	7	149 Aug	183½ Feb
1904	0	3½	11½	0	25½ Mch	58⅜ Nov	8½	185 Feb	220 Oct	7	65 Mch	82¼ Nov	7	149 Mch	190½ Dec
1905	0	9¾	14	0	38 May	59 Mch	8½	175 Nov	214 Mch	7	40 Aug	79 Jan	7	178½ May	240¾ Nov
1906	0	9⅛	17¼	0	40⅛ May	83⅝ Jan	5	130⅝ Apr	181¾ Jan	2	74½ May	85¾ Apr	7	189 May	234¾ Nov
1907	0	5¾	12½	0	14 Nov	57⅞ Jan	4	74 Oct	140¼ Mch	7	46 Oct	88 Jan	9	123⅝ Oct	227½ Jan
1908	0	3⅜	8¾	0	15⅝ Feb	42 Dec	4	96 Jan	167 Dec	5	56 Jan	80 Aug	9	141½ Feb	181⅜ Dec
1909	0	6½	19¼	0	29 Feb	53 Dec	4	114½ Feb	165¼ Jan	5	73¼ Feb	93½ Jun	9	167¾ Feb	200 May
1910	0	9¾	19¼	0	22½ Jul	50 Jan	6	122½ Jul	160⅜ Jan	5	70⅜ Jul	86⅜ Jan	9	149¼ Jul	185 Jan
1911	0	9	14⅝	0	25 Sep	36⅜ Feb	6	128¾ Sep	148½ Jun	5	73 Oct	85 May	9	159½ Sep	172½ Jul
1912	0	10	19⅝	0	23⅛ Feb	43¾ Sep	6	135¾ Dec	149½ Aug	5	75 Dec	89½ Oct	9	162 Dec	175½ Feb
1913	0	11¼	17⅝	0	24½ Jun	41½ Feb	6	125⅛ Jun	142⅜ Jan	5	61½ Jun	79¼ Jan	9	147½ Jun	167 Jan
1914	0			0	20½ Jul	34½ Feb	6	112½ Dec	139½ Jan	5	58⅛ Jul	72 Jan	9	138¾ Dec	159½ Feb
1915	0	18¼	109⅞	0	21¾ Jan	66½ Sep	6¾	113¾ Jan	150½ Oct	5	65 Jan	96¾ Dec	9	138½ Aug	154⅛ Nov

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Del., Lack. & Wn.			Erie			Erie, 1st Pfd.			Fed. Mg. & Sm., Pfd.			General Chemical		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892	7	138⅛ Jan	167½ Feb	0	23⅛ Dec	34¾ Jan	3	53½ Dec	77½ Mch						
1893	7	127 Jul	175 Nov	0	7¾ Jul	26⅝ Jan	0	15 Jul	58 Jan						
1894	7	155¼ Oct	174 Sep	0	9½ Dec	18⅝ Mch	0	23 Dec	39¼ Mch						
1895	7	154 Dec	174 Oct	0	7¼ Mch	15⅝ Dec	0	16 Feb	32⅞ Jun						
1896	7	138 Aug	166 Jun	0	10¼ Aug	17¾ Nov	0	27 Jul	41¾ Mch						
1897	7	146½ May	164 Aug	0	11½ Apr	19 Sep	0	27 Apr	46⅝ Sep						
1898	7	140 Oct	159 Feb	0	11 Apr	16¼ Feb	0	29¼ Apr	43⅜ Feb						
1899	7	157 Jan	194½ Oct	0	10 Dec	16¼ Jan	0	27⅞ Dec	42 Jan						
1900	7	171½ Sep	194¾ Dec	0	10½ Sep	27⅛ Dec	0	30⅜ Sep	63½ Dec						
1901	7	188¼ Jan	258 Dec	0	24½ May	45½ Jun	1½	59¾ Jan	75 Dec						
1902	7	231 Nov	297 Feb	0	28⅝ Dec	44⅝ Jan	3	60½ Dec	75¾ Jan				4	60⅛ Dec	67½ May
1903	7	230 Jul	276½ Feb	0	23 Aug	42⅝ Jan	3½	62⅛ Apr	74 Feb				5	51 Dec	72 Feb
1904	17	250½ Feb	359¾ Dec	0	21½ May	41⅝ Nov	4	55⅝ May	77 Dec	7	71 Nov	90 Nov	0	43 Mch	60 Dec
1905	19¼	335 Jan	498½ Oct	0	37½ May	52¾ Aug	4	74⅞ May	85½ Aug	7	60 Jan	145 Nov	0	56 Mch	80 Dec
1906	20	437¾ May	560 May	0	38⅛ May	50⅞ Jan	4	74¾ Dec	83 Jan	7	91 Jul	112⅞ Jan	4	74 Dec	84½ Feb
1907	20	369½ Oct	510 Jan	0	12¼ Nov	44¼ Jan	4	28 Nov	75⅞ Jan	7	47 Oct	97 Jan	4	50 Oct	75½ Jan
1908	20	420 Jan	575 Nov	0	12 Mch	36 Nov	0	24⅜ Mch	51⅜ Dec	7	59 Feb	89 Nov	4	50 Feb	65 May
1909	70	535 Feb	680 Apr	0	22⅝ Mch	39 Jun	0	36½ Mch	56¾ Aug	7	80 Feb	94 Aug	4	61 Jan	95 Aug
1910	20	490 Jul	620 Mch	0	19½ Jul	34⅝ Jan	0	35 Jul	52¾ Mch	7	37 Oct	88 Jan	15	93 Jun	110 Jan
1911	20	510 Feb	570 Nov	0	27¼ Jan	38⅜ Jul	0	45⅝ Jan	61¼ Jul	7	37 Dec	66½ May	6	100 Jan	135 Feb
1912	20	530 Aug	597 Dec	0	30 Dec	39⅛ Apr	0	47½ Dec	57⅞ Apr	6	37⅛ Jan	52¾ Sep	11	128 Jan	225 Aug
1913	20	380 Dec	445 Jan	0	20¼ Jun	32½ Jan	0	33½ Jun	49½ Jan	6	33 Mch	44 Jan	11	170 Jun	185⅛ Apr
1914	20	388 Jan	406¾ Jun	0	20⅛ Jul	32½ Jan	0	32 Jul	49¾ Jan	5	28 Dec	43 Jan	11	160 Apr	180 Jan
1915	20	199⅞ Jan	238 Nov	0	19⅞ Feb	45⅝ Nov	0	32¼ Feb	59½ Nov	4	20 Mch	65 Jun	11	165 Jan	360 Oct

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	General Motors			Gen. Electric			Great Northern, Pfd.			Ill. Central			Int. Paper, Pfd.		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892				4	88¼ Jan	119⅞ Oct	5	119 Jan	144 Aug	5	95½ Sep	110 Jan			
1893				6	30 Jul	114¼ Jan	5	100 Jul	142½ Feb	5	86 Jul	104 Jan			
1894				0	30⅜ Jan	45⅛ Mch	5	100 Jan	106 Apr	5	82¾ Dec	95¼ Sep			
1895				0	20 Dec	41 Sep	5	100 Jan	134 Jun	5	81⅛ Jan	106 Sep			
1896				0	20 Jul	39½ Mch	5	108½ Mch	122 Dec	5	84⅛ Aug	98 Jan			
1897				0	28⅝ May	41⅝ Sep	5½	120 Jan	141 Sep	5	91½ Apr	110¾ Aug			
1898				0	29¼ Mch	97 Dec	6¼	122 Jul	180 Jun	5	96 Apr	115⅝ Dec	3	85 Sep	97¾ Oct
1899				3	95⅛ Jan	132 Nov	7	142½ Jan	195 Mch	5	105½ Dec	122 Jan	6	62¼ Dec	95 Jan
1900				6½	120 Jan	200 Dec	7	144¾ Jun	191½ Dec	5½	110 Jun	132¾ Dec	6	58 Mch	75 Nov
1901				9	183½ Jan	289¾ Dec	7	167½ May	208 Mch	6	124 May	154¾ Jun	6	69 Jan	81¼ Sep
1902				8	170½ Oct	334 Apr	7	181½ Mch	203 Dec	6	137 Jan	173½ Aug	6	70 Dec	77¼ Jan
1903				8	136 Sep	204 Feb	7	160 Oct	209 Jan	6	125⅛ Jul	151 Jan	6	57½ Nov	74¼ Feb
1904				8	151 Jun	194½ Nov	7	170 Mch	242½ Dec	6	125¾ Feb	159 Dec	6	64⅛ Feb	79⅞ Dec
1905				8	169 May	192 Mch	7	236 Jan	335 Apr	7	152¾ Jan	183 Sep	6	76⅛ Feb	88¼ Dec
1906				8	156 Dec	184 Oct	7	178 Dec	348 Feb	6	164 May	184½ Jun	6	80 Dec	90 Jan
1907				8	89½ Oct	163 Jan	7	107½ Oct	189¾ Jan	7	116 Nov	172 Jan	6	51 Nov	81 Jan
1908				8	111 Jan	162¾ Dec	7	113¾ Feb	148¼ Dec	7	122½ Feb	149¾ Nov	4	47 Oct	65 Jan
1909	150	80 Nov	200 Oct	8	150⅛ Feb	172¾ Aug	7	136⅝ Feb	157⅞ Aug	7	137 Feb	162⅛ Aug	2	47¾ Mch	69¾ Aug
1910	0	40 Sep	130 May	8	134 Jul	160⅞ Jan	7	118 Jul	143⅞ Jan	7	124 Jul	147 Jan	2	41½ Jul	61½ Jan
1911	0	35 Jan	51¾ Aug	8	142 Sep	168⅝ May	7	119 Sep	140 Jun	7	132 Jan	147 Jul	2	44⅝ May	56⅝ Jan
1912	0	30 Jan	42⅞ Sep	8	155 Jan	188½ Jul	7	126 Jan	143¾ Aug	7	120⅝ May	141⅛ Jan	2	45⅞ Jan	62⅞ May
1913	0	25 May	40 Aug	8	129¾ Jun	187 Jan	7	115½ Jun	132⅝ Jan	6	102¾ Dec	128⅞ Feb	2	32⅛ Oct	48½ Jan
1914	0	37⅝ Jan	99 May	8	137½ Dec	150⅝ Feb	7	111⅝ Dec	134¾ Feb	5	103½ Dec	115 Jan	2	30 Dec	41 Jan
1915	50	82 Jan	558 Dec	8	138 Mch	185½ Oct	7	112¾ Jan	128⅝ Nov	5	99 Jul	113 Apr	2	33 Feb	50¾ Dec

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

	Lackawanna Steel			Lehigh Valley			Louis. & Nash.			Mackay Co's			Mex. Petroleum		
Years	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892		No quotations. Company virtually a private syndicate, in its early years		0	50¼	62½	4½	64¾ Sep	84½ Jan						
1893				0	29⅝	62	4	39¾ Dec	77⅝ Jan						
1894				0	32⅝	42⅝	0	40⅞ Jan	57⅝ Sep						
1895				0	27½	43	0	39 Dec	66⅛ Sep						
1896				0	27⅞	38⅝	0	37⅛ Aug	55⅝ Feb						
1897				0	20⅛	32¼	0	40⅛ Apr	63⅞ Sep						
1898				0	17½	26¼	0	44 Apr	65¼ Dec						
1899				0	22⅛	30	3½	63 Mch	88⅝ Oct						
1900				0	21⅞	30½	4	68¾ Sep	89⅛ Dec						
1901				0	28½	39⅝	5	76 May	111¾ Jun						
1902				0	29¼	38½	5	102⅛ Jan	159½ Aug						
1903				0	34½	45⅞	5	95 Sep	130½ Jan						
1904				½	33¾	59⅞	5	101 Feb	148¾ Dec	0	18 Apr	40 Dec			
1905				2	52½	90½	6	134½ Jan	157⅝ Sep	2	37	60			
1906				2	65	86	6	136¼ May	156½ Jan	3	40	70			
1907				3	48½	78⅞	6	85½ Nov	145⅛ Jan	4	40 Oct	75¼ Jan			
1908				3	52⅝	76¾	5½	87¼ Feb	125¾ Dec	4	52 Feb	78 Nov			
1909				3	67	113	5½	121 Jan	162½ Aug	4	70 Feb	95½ Nov			
1910	0	34 Oct	45 May	3	62½	121¼	7	131½ Jul	159¾ Jan	5	79 Jul	98 Oct			
1911	0	30 Sep	48 Apr	5	75½	93½	7	136½ Sep	160¾ Nov	5	74½ Dec	95 Feb			
1912	0	29 Mch	55½ Sep	5	77½	93	7	138 Dec	170 Aug	5	75⅛ Jan	92¼ Jul	4	62¾ Apr	90½ Oct
1913	1	29⅞ Jun	49⅞ Feb	5	70¾	84¼	7	126¼ Jun	142¼ Jan	5	75⅝ Jul	87 Jan	4	41¾ Nov	78¼ Feb
1914	0	28 Dec	40 Jan	5	59	78⅛	7	125 Jul	141⅞ Jan	5	61 Jul	87⅝ Feb	0	46½ Jan	73½ Feb
1915	0	28 Jan	94¾ Sep	5	64⅝	83¼	5	104½ Jul	130½ Nov	5	72⅝ Jan	84 Nov	0	51 Jan	124½ Dec

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Minn., S. P. & S. S. M.			Mo., Kan. & Tex., Pfd.			Missouri Pac.			National Biscuit			National Lead		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892				0	24 1/8 Dec	33 1/8 Jan	0	53 7/8 Dec	65 3/4 Jan				0	31 Jan	51 5/8 Dec
1893	0	19 1/2 Feb	39 3/4 Jan	0	13 3/8 Jul	28 3/8 Jan	0	16 1/2 Jul	60 Jan				2	18 1/2 Jul	52 1/8 Jan
1894	0	Not	quoted	0	18 7/8 Jun	27 1/8 Apr	0	18 1/4 Jan	32 1/2 Apr				3	22 Jan	44 7/8 Aug
1895	0	"	"	0	18 1/4 Dec	41 Sep	0	18 5/8 Mch	42 1/2 Sep				1	17 1/2 Dec	37 1/2 Sep
1896	0	"	"	0	16 Jul	31 1/8 Feb	0	15 Aug	29 3/4 Apr				0	16 Aug	28 1/2 Feb
1897	0	6 Dec	6 Dec	0	24 3/4 Apr	42 Sep	0	10 May	40 1/4 Sep				0	21 7/8 Feb	44 Sep
1898	0	7 Jan	7 Jan	0	28 3/4 Mch	46 1/4 Dec	0	22 Mch	46 1/4 Dec	0	30 5/8 Aug	52 1/2 Dec	1	26 1/4 Mch	39 5/8 Aug
1899	0	8 3/4 Jan	37 1/2 May	0	28 3/8 Dec	45 1/4 Aug	0	33 Dec	52 1/2 Apr	1	31 Dec	62 Jan	1	22 1/2 Dec	40 1/2 Jan
1900	0	14 Sep	27 Apr	0	25 5/8 Sep	47 1/2 Dec	0	38 3/8 Jan	72 1/2 Dec	4	23 Jun	40 1/2 Nov	1	16 3/4 Oct	28 1/4 Feb
1901	0	15 May	36 1/4 Nov	0	37 May	68 5/8 Apr	2 1/2	69 Jan	124 1/2 Jun	4	37 Jan	46 Jun	0	15 Mch	25 1/2 Jun
1902	0	36 1/2 Jan	84 Nov	0	51 Jan	69 3/4 Sep	5	96 3/4 Mch	125 1/2 Sep	4	40 Nov	53 1/4 Mch	0	15 1/2 Jan	32 Sep
1903	2	42 Aug	79 1/2 Feb	0	33 Oct	63 1/2 Feb	5	85 3/4 Aug	115 7/8 Feb	4	32 Oct	47 5/8 Feb	0	11 1/2 Oct	29 1/2 Feb
1904	4	55 Jan	95 Oct	0	32 1/4 Jun	65 1/4 Dec	5	87 Feb	111 1/2 Dec	4	36 Jan	59 1/2 Nov	0	14 1/4 Mch	26 1/4 Oct
1905	4	89 1/2 Jan	145 Dec	0	56 1/4 May	73 Aug	5	94 1/2 May	110 7/8 Mch	4	52 Aug	69 1/4 Dec	0	24 1/4 Jan	89 1/2 Dec
1906	4	134 Dec	164 Mch	4	64 1/4 Apr	76 Nov	5	85 1/2 May	106 3/4 Jan	5	62 May	79 1/2 Dec	2	67 1/2 Dec	95 3/8 Jan
1907	4	60 Oct	140 1/4 Jan	4	53 Nov	72 3/4 Jan	5	44 1/8 Dec	92 3/4 Jan	5 3/4	58 1/2 Oct	86 1/4 Jan	4 1/2	33 Nov	76 1/4 Jan
1908	6	79 1/4 Jan	135 Nov	4	46 Feb	75 1/2 Dec	2 1/2	28 1/2 Feb	67 1/2 Dec	6	68 Jan	97 Dec	5	36 Feb	92 Aug
1909	6	132 1/2 Jan	149 1/2 Jan	4	71 Feb	78 1/4 Oct	0	65 Feb	77 1/2 Aug	5 3/4	96 1/2 Jan	120 Sep	5	71 1/4 Feb	94 Aug
1910	7	114 Jul	145 Mch	4	57 Jul	74 5/8 Jan	0	41 Jul	73 5/8 May	6	100 Aug	115 Jan	4 1/2	46 1/2 Jul	89 5/8 Jan
1911	7	124 3/4 Sep	152 1/4 Mch	4	62 3/4 Sep	70 Oct	0	33 1/4 Sep	63 Feb	8 1/4	117 1/4 Jan	143 3/4 Nov	3	42 1/2 Sep	59 Feb
1912	7	129 Feb	154 1/2 Aug	4	57 3/8 May	66 Apr	0	35 Jul	47 3/4 Mch	7	114 Dec	161 Apr	3	51 1/8 Jan	68 1/4 Oct
1913	7	115 1/4 Jun	142 1/4 Jan	4	52 Jun	64 1/2 Apr	0	21 1/4 Dec	43 5/8 Jan	7	104 Jun	130 Sep	3	43 Oct	56 1/4 Jan
1914	7	101 Dec	137 Feb	0	26 Dec	60 Jan	0	7 Dec	30 Jan	7	120 Jul	139 Feb	3	40 Jul	52 Jan
1915	7	106 Jan	126 1/2 Nov	0	10 1/8 Sep	40 Apr	0	1 3/4 Jul	18 1/4 Apr	7	116 Apr	132 Jan	3	44 Jan	70 3/4 May

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	New York Air Brake			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	Div $	Low	High
1892				5	107 1/8 Sep	119 1/4 Mch	3	71 7/8 Sep	81 1/2 Jan	10	224 Jan	252 Jun	0	17 1/2 Sep	23 1/8 Feb
1893				5	92 Jul	111 1/2 Jan	3	45 Jul	78 Jan	10	188 Sep	262 1/2 Jan	0	11 Jul	19 3/4 Jan
1894				5	95 1/4 May	102 1/2 Aug	4	62 Jul	75 1/2 Feb	10	178 Jul	197 Dec	0	14 Jun	17 3/4 Sep
1895				4	90 Dec	104 5/8 Aug	0	65 Apr	75 Dec	9	174 Dec	218 Jun	0	11 3/4 Dec	19 1/4 May
1896				4	88 Aug	99 1/8 Feb	5	60 Aug	80 Jan	8	160 Jul	184 Jan	0	11 1/8 Aug	16 5/8 Nov
1897	0	27 Sep	31 1/2 Aug	4	92 1/2 Feb	115 1/2 Sep	0	60 May	81 1/2 Sep	8	160 Feb	185 1/2 Sep	0	12 3/4 Apr	20 1/2 Sep
1898	0	14 Apr	120 Sep	4	105 Mch	124 7/8 Dec	2	65 May	76 Jan	8	178 1/4 Jan	201 Dec	0	13 3/8 Apr	19 1/8 Dec
1899	2	110 Dec	230 Jul	4 1/4	120 Dec	144 3/4 Mch	0	65 Mch	85 Oct	8	198 Jan	222 Apr	0	18 3/8 Jan	28 7/8 Mch
1900	8	115 May	175 Nov	5	125 5/8 Jun	145 3/8 Dec	5	74 3/4 May	110 Dec	8	207 3/4 Sep	215 3/4 Jan	0	18 1/4 Jun	32 1/4 Dec
1901	8	133 Jul	175 Apr	5	129 3/8 Jan	174 1/2 Nov	5	97 Mch	120 Sep	8	206 1/2 Feb	217 Jun	0	24 May	40 1/2 May
1902	8	148 Mch	196 Apr	5	147 Nov	168 7/8 Jan	5	110 1/2 Nov	124 1/2 Jan	8	209 1/2 Jan	255 Apr	0	25 1/4 Dec	37 5/8 Sep
1903	8	110 Sep	177 Jan	5	112 5/8 Jul	156 Jan	5	100 Oct	118 Jan	8	187 1/2 May	225 1/4 Jan	0	19 Sep	35 1/4 Feb
1904	8	120 Feb	164 Nov	5	112 7/8 Mch	145 1/2 Dec	5	100 1/4 Feb	115 Nov	8	185 1/4 May	199 Oct	0	19 3/8 Mch	47 7/8 Oct
1905	8	140 May	168 3/4 Nov	5	136 3/4 May	167 3/4 Mch	5	114 Jul	122 1/2 Jan	8	191 3/4 Dec	216 Sep	4 1/2	40 3/8 Jan	64 Mch
1906	8	135 May	163 3/4 Jan	5	126 Nov	156 1/4 Jan	5	111 Apr	120 7/8 Jan	8	189 1/2 Dec	204 7/8 Jan	2	43 3/4 May	57 1/4 Jan
1907	8	47 1/2 Dec	141 1/2 Jan	6	89 Dec	134 3/4 Jan	5	85 Nov	110 Jan	8	127 3/8 Nov	189 Jan	2	28 Oct	48 3/8 Jan
1908	0	50 Jan	98 Nov	5 1/4	90 1/8 Jan	126 Dec	5	90 Jan	105 Nov	8	128 3/8 Jan	161 Nov	2	29 1/8 Feb	47 7/8 Dec
1909	0	80 Feb	97 1/4 Nov	5	120 1/2 Feb	147 3/4 Aug	5	100 Feb	100 Feb	8	154 Nov	174 3/4 Jun	2	42 1/4 Feb	55 5/8 Jun
1910	3	59 Jun	95 1/2 Jan	5 3/4	105 1/8 Jul	128 Mch	5	101 Jul	109 3/4 Jan	8	149 Apr	162 Mch	2	38 1/2 Aug	50 Jan
1911	4 1/2	45 Oct	76 Feb	5 1/4	99 7/8 Sep	115 1/2 Feb	5	98 1/2 Nov	101 5/8 Mch	8	126 7/8 Sep	151 1/8 Feb	2	37 3/4 Sep	46 7/8 Jul
1912	1 1/2	50 Feb	83 Aug	5	106 1/8 Dec	121 1/2 Apr	5	102 1/2 Mch	103 Mch	8	126 Dec	142 1/4 Apr	0	29 7/8 Jun	41 3/8 Apr
1913	6	56 Jul	82 1/2 Feb	5	90 3/8 Dec	109 3/4 Jan	5	102 Jun	102 Jun	5	65 5/8 Dec	129 7/8 Jan	2	25 1/8 Jun	33 7/8 Jan
1914	6	58 Jul	69 Jan	5	77 Jul	96 5/8 Jan	2 1/2	—	—	0	49 5/8 Jul	78 Jan	0	18 1/4 Dec	31 5/8 Jan
1915	6	56 1/2 Feb	164 3/4 Sep	5	81 1/2 Mch	110 1/2 Dec	0	75 Aug	84 1/4 Dec	0	43 Feb	89 Oct	0	21 3/4 Jan	35 Apr

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

	Nash., Chatt. & St. L.			Norf. & Western			North American			Northern Pac.			P., C., C. & St. L.		
Years	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892	5	84 Oct	91 Jun	0	9 Sep	18 Jan	0	9⅛ Dec	18⅞ Jan	2	15 Dec	26½ Jan	0	19 Dec	30⅝ Jan
1893	5	55 Aug	90 Apr	0	5⅛ Jul	9¾ Jan	0	2¼ Aug	11⅞ Mch	0	3¾ Aug	18½ Feb	0	10 Dec	21½ Jan
1894	2½	65 Aug	74 Mch	0	4 Jul	9½ Sep	0	2¾ Jul	5⅝ Mch	0	3½ Jul	6¼ Mch	0	10½ Jul	21¼ Sep
1895	4	64 Jan	81½ Oct	0	1¼ Dec	6¼ May	0	2¾ Jan	7 May	0	2½ Jan	8⅛ May	0	12 Dec	22¼ May
1896	4	70 Oct	70 Oct	0	0⅛ Apr	12¾ Nov	0	3½ Aug	6½ Feb	0	0¼ May	16⅞ Nov	0	11 Aug	18¼ Feb
1897	4	70 Jan	85 Sep	0	9 Apr	17¼ Sep	0	3⅝ Apr	6⅛ Aug	0	11 Apr	22⅜ Dec	0	11½ Mch	39½ Dec
1898	4	60 Jun	72½ Nov	0	11 Oct	19⅜ Dec	0	4¼ Jan	7¾ Dec	0	19 Feb	44¼ Dec	0	38⅞ Jan	63⅞ Dec
1899	0	62 Dec	62 Dec	0	17½ Jan	28⅜ Aug	0	6⅞ Jan	17⅜ Nov	2	42⅝ Jan	57½ Aug	0	43 May	88 Jan
1900	0	43 Jun	50 Dec	0	22⅝ Jan	45¾ Dec	0	13⅝ Jan	22¾ Dec	4	45¾ Sep	86½ Dec	0	49¾ Sep	80½ Jan
1901	0	70 Jun	82¼ Nov	2	45½ Jul	61⅜ Nov	0	19⅛ Jan	109 Jun	4	77¼ Jan	1000 May	1	57 Jan	81 Dec
1902	0	80 Jan	122 Apr	2½	55 Jan	80¾ Oct	0	88 Jan	134 Sep	5½	In the	Merger	3	80⅛ Jan	105½ Sep
1903	0	85 Oct	133½ Dec	3	53¾ Nov	76½ Feb	4	68 Sep	124½ Jan	7	“	“	3	55 Sep	94 Jan
1904	4	101½ Feb	147⅝ Dec	3	53½ Mch	80½ Dec	5	80 Mch	107 Nov	6¾	“	“	3	55 Apr	80 Dec
1905	5	137 Jan	158 Apr	3½	76 May	88½ Mch	5	95⅝ Nov	107 Apr	7	165 Apr	216 Aug	3	70 May	87¾ Mch
1906	5	133 May	149½ Jan	4½	84 Apr	97⅝ Oct	5	87½ Nov	107 Jan	7	179¼ May	232½ Feb	3	75 May	87 Jan
1907	6	97 Dec	147 Jan	5	56 Oct	92¼ Jan	5	37 Nov	89¾ Jan	7	100½ Oct	189½ Jan	4	51 Oct	78 Jan
1908	5½	97¾ Jan	122½ Dec	4	58 Feb	86¼ Nov	0	42⅛ Mch	78 Nov	16½	116⅞ Jan	157¾ Nov	4	59 Jan	88½ Dec
1909	5	122½ Jan	142 Dec	4½	84¼ Jan	102 Dec	3¾	72 Jan	87½ Jun	7	133¼ Feb	159½ Aug	4	86½ Jan	99⅞ Dec
1910	6	125 Jul	140 Nov	5	88½ Jul	108⅝ Mch	5	60⅛ Nov	84 Jan	7	111½ Aug	145⅝ Jan	6¼	89 Jul	104⅝ Mch
1911	6	140¼ Jan	160 Jun	5¼	99¾ Sep	111¼ Nov	5	64 Jan	76¾ May	7	110¾ Sep	137⅞ Jun	5	90⅛ Sep	100 Jan
1912	6½	160¼ Apr	180 Oct	6	107¾ Feb	119¼ Aug	5	72½ Dec	87⅞ Aug	7	115⅜ Jan	131½ Aug	5	98½ Jan	111½ Sep
1913	7	132½ Jun	170 Jan	6	98 Jun	113½ Jan	5	60 Jun	81½ Jan	7	101¾ Jun	122⅝ Jan	5	77⅛ Dec	104 Jan
1914	7	135 Jul	144 Jan	6	96½ Dec	105⅞ Jul	5	64⅛ Jul	79¼ Mch	7	96⅝ Dec	118½ Feb	2	64⅛ Jul	91 Feb
1915	5	120 Jun	134 Dec	6	99½ Jan	122⅝ Dec	5	64 Jan	81 Apr	7	99⅛ Feb	118⅜ Dec	0	65 May	86 Nov

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

	Pacific Mail			Pennsylvania			People's Gas			Pittsburgh Coal, Pfd.			Pr. Steel Car		
Years	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892	0	25 Dec	40⅜ Jan	3	53 Nov	57⅜ Jan		71¾ Jan	99⅜ Nov						
1893	0	8½ Jul	27½ Jan	3½	46⅝ Dec	55½ Jan		39 Jul	94½ Jan						
1894	0	13½ May	24 Nov	2½	48 Jan	52⅛ Apr		58¾ Jan	80 Jun						
1895	0	20 Jan	34½ Sep	2½	48¾ Jan	57¼ Sep		49⅞ Jul	78¼ Jau						
1896	1	15¼ Aug	31 Feb	2½	49¾ Aug	54¾ Apr		44⅝ Aug	78¾ Nov						
1897	2	24 Jan	39¼ Sep	2½	51¾ Jan	59½ Sep		73¼ Jan	108¾ Sep						
1898	2½	21 Apr	46 Dec	2½	55⅜ Mch	61⅜ Dec	6	86½ Apr	112 Nov						
1899	3	35 Dec	55 Jan	2½	61 Jan	71 Jan	6	90½ Dec	129½ Apr	0	75	81	0	44¾ Jun	61 Aug
1900	0	25¾ Jun	57 Nov	3	62⅛ Sep	74¾ Dec	6	81⅝ Oct	111½ Apr	7	78	88	6	32½ Sep	58¾ Jan
1901	0	30½ May	49½ Nov	3	68½ May	80¾ Apr	6	95¾ Jan	120½ Jun	7	86	99¼	4	30 Mch	52 Jan
1902	0	37 Nov	49⅝ Mch	3	73½ Jan	85 Sep	6	98¼ Jan	109½ Sep	7	86½	92⅞	4	39 Jan	63½ Oct
1903	0	17 Aug	42¾ Jan	3	55⅜ Nov	78¾ Jan	6	87¾ Sep	108⅜ Feb	7	56	92⅛	5	22½ Nov	65¾ Jan
1904	0	24 Feb	55 Nov	3	56 Feb	70 Dec	6	92¾ Mch	112½ Dec	7	45	85	3	24¼ May	44¼ Oct
1905	0	33 May	53⅜ Dec	3	65¾ May	74 Aug	6	97¼ May	115½ Apr	3½	45⅛ Jul	80¼ May	0	33½ Jan	58¾ Dec
1906	0	28¾ Jun	51½ Jan	3¼	61¼ Jul	73¾ Jan	5	88 Jul	103 Jan	0	50 Jul	62½ Jan	0	43 May	64⅝ Jan
1907	0	19 Nov	41½ Jan	3½	51¾ Nov	70⅝ Jan	6	70¼ Oct	98⅝ Jan	0	37 Nov	60⅝ Jan	0	15⅝ Nov	57 Jan
1908	0	24 Apr	40¼ Dec	3	54⅜ Jan	66⅛ Dec	6	80 Jan	106½ Dec	0	36½ Feb	50 Dec	0	17¼ Feb	45 Dec
1909	0	29⅛ Feb	48½ Nov	3	63 Feb	75⅝ Sep	6¾	101½ Jan	120 Aug	0	40 Feb	87½ Dec	0	30½ Feb	56 Aug
1910	0	22⅞ Jul	43¼ Jan	3	61¼ Jul	69¼ Mch	7	103 Jul	116⅜ Jan	5	60¼ Jul	85 Jan	0	25 Jul	51⅞ Jan
1911	0	23⅛ Apr	33⅜ Nov	3	59¼ Sep	65 Feb	7	101½ Aug	109 Jan	5	67¾ Jan	90⅞ Jul	0	25 Sep	37⅝ Jul
1912	0	28¾ Dec	38 Sep	3	59⅞ Dec	63⅛ May	7	103 Jan	122½ Oct	5	77 Feb	100¾ Aug	0	28¾ Feb	40⅞ Sep
1913	0	16 Jun	31½ Jan	3	53 Dec	61⅞ Jan	7¼	104 Jun	129¾ Sep	5	73 Jun	95 Jan	0	18½ Jun	36 Jan
1914	0	17¼ Jul	29 Jan	3	61¼ Dec	57¾ Jan	8	106 Jul	125 Jan	5	79 Dec	93½ Feb	3	26¾ Jan	46 Feb
1915	25	26⅛ Feb	49½ Oct	3	51⅞ Feb	61½ Nov	8	106½ Dec	123½ Apr	5	81⅝ Jan	114 Oct	0	25 Mch	78¼ Oct

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Pullman			Reading			Rep. Iron & S., Pfd.			Rock Island			St. L. Sou. W'n., Pfd.		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892	8	184 Jan	200⅛ May	0	19 Jan	32½ Feb				3	75½ Jun	94¼ Jan	0	11½ Dec	22⅜ Jan
1893	8	132 Aug	206 Apr	0	6 Jul	26⅞ Jan				4	51½ Jul	89⅜ Jan	0	6 Jul	15 Jan
1894	8	152 Jul	174 Apr	0	6⅝ Dec	11¾ Mch				4	58½ Oct	72⅜ Apr	0	7 Jul	11 Apr
1895	8	146 Dec	178¾ Jun	0	2⅜ Dec	11⅜ Sep				3	59 Dec	84⅜ Aug	0	8 Dec	19⅞ Sep
1896	8	138 Aug	164 Feb	0	1¼ Jan	15⅞ Nov				2	49¼ Aug	74⅞ Feb	0	6½ Aug	13 Feb
1897	8	152 Jan	185 Sep	0	8⅜ Apr	14⅝ Sep				2	60¼ Apr	97¼ Sep	0	3½ Apr	14⅜ Sep
1898	28	132 Nov	216 Jul	0	7¾ Mch	11⅞ Jan				3	80 Mch	114⅞ Dec	0	7¾ Mch	18 Dec
1899	6½	156 Jan	207¾ Oct	0	7¾ Dec	12½ Mch	1¾	60⅛ Dec	79 Aug	4¾	100 Dec	122⅛ Jan	0	17 Jan	40⅜ Aug
1900	8	176 Jun	204 Dec	0	7½ Sep	13 Dec	7	49 Aug	70¾ Feb	5	102 Jun	122⅛ Dec	0	21⅞ Jun	45½ Dec
1901	8	195⅛ Jan	225 Oct	0	12¼ Jan	29 Dec	7	55¼ Jan	82 Apr	5	116⅞ Jan	175¼ Jun	0	41½ Jan	71 Jun
1902	8	215 Jan	250 Apr	0	26¼ Mch	39¼ Sep	7	68 Jan	83⅜ Sep	5 0	152 Jan 33½ Dec	206 Sep 50⅛ Dec	0	55¼ Mch	80 Sep
1903	8	196 Jul	235¾ Jan	0	18¾ Nov	34⅝ Jan	7	36¾ Nov	80⅜ Feb	0	19½ Aug	53⅝ Jan	0	24 Aug	66 Jan
1904	8	209 Mch	242 Nov	0	19⅜ Mch	41⅝ Dec	0	37 May	73½ Nov	0	19⅛ Mch	37¾ Dec	0	25⅜ Jun	60¾ Dec
1905	8	230 May	258 Aug	1½	39½ Jan	71⅞ Nov	1¾	67 Jan	108 Dec	0	21¾ Dec	37⅞ Jan	0	55 Dec	66⅝ Apr
1906	44	180 Dec	270 Nov	2	56 May	82 Jan	14⅜	91 May	110½ Jan	0	22½ Jul	32⅝ Nov	0	48¾ May	63⅝ Oct
1907	8	137 Oct	181⅛ Jan	2	35¼ Oct	69½ Jan	13	50½ Oct	100 Jan	0	11¼ Nov	30⅛ Jan	0	25 Nov	62½ Feb
1908	8	147 Jan	174 Nov	2	46 Feb	71⅝ Dec	3½	63 Jun	89½ Nov	0	10½ Feb	25¼ Dec	0	24½ Feb	55⅞ Dec
1909	8	169 Jan	200 Aug	2	59 Feb	86⅜ Sep	4½	67⅛ Feb	110¼ Jul	0	20⅞ Feb	81 Dec	2	47½ Jan	82 Dec
1910	28	155 Jun	200 Jan	3	65⅝ Jul	86⅛ Feb	8	82¾ Jul	104¼ Jan	0	22⅞ Jul	57¼ Jan	5	51½ Jul	77½ Jan
1911	8	154 Sep	163 Jan	3	67 Sep	80⅞ Feb	8	74⅛ Oct	99⅜ Jan	0	22¾ Sep	33⅞ Mch	4	59¾ Jan	72 Jun
1912	8	158½ Feb	175 Aug	3	74⅛ Jan	89⅝ Apr	2¾	64½ Feb	93⅜ Oct	0	22⅝ Dec	30½ Apr	5¾	68½ Jan	80⅝ Oct
1913	8	149 Sep	165 Jan	4	75¾ Jun	85⅞ Dec	8	72 Jun	92¼ Sep	0	11⅝ Oct	24⅞ Feb	4¾	56½ Dec	75 Jan
1914	8	150 Dec	159 Jan	4	68½ Jul	86⅛ Jan	6¼	75 Dec	91¼ Mch	0	0⅝ Dec	16⅝ Jan	1½	36 Jul	65⅛ Jan
1915	8	150⅛ Mch	170½ Oct	4	69⅜ May	85⅝ Nov	3	72 Jan	112⅝ Dec	0	0⅛ Jul	2½ Apr	0	29 Sep	45½ Dec

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

	Seaboard, Pfd.			Southern Rwy., Pfd.			Southern Pacific			Sl. Sheffield			Standard Oil, N. J.		
Years	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892							0	33⅝ Dec	41¼ Jan				12¼	157½	163
1893							0	17½ Sep	35¼ Jan				12	135	168
1894				0	34¼ Aug	45¼ Sep	0	17½ Jul	25 Mch				12	158	166
1895				0	29½ Jan	44⅛ Jul	0	16¾ Apr	26⅜ Aug				17	168	200½
1896				0	15½ Aug	33¼ Feb	0	14 Nov	22¼ Jan				31	199⅝	262½
1897				0	22⅞ Apr	38⅜ Sep	0	13½ Jan	23⅛ Sep				33	251	361½
1898				0	23⅝ Mch	43⅜ Dec	0	12 Apr	35 Dec				30	360	443½
1899				2	40⅞ Jan	58⅝ Nov	0	27 May	44¼ Nov				33	448	498½
1900				3	49¼ Jun	73⅛ Dec	0	30⅜ Jun	45¾ Dec	0	17½ Oct	26 Nov	48	470	825¼
1901				4	67¼ Jan	94⅝ Nov	0	29 May	63⅝ Jun	0	19½ Feb	41½ Apr	48	650	842
1902				5	89¾ Dec	98⅓ Aug	0	56 Dec	81¼ Sep	0	29½ Jan	83 Sep	45	612	720½
1903				5	69½ Oct	96 Feb	0	38⅝ Sep	68¼ Mch	0	22¼ Oct	72 Feb	44	585	750
1904				5	77½ Jan	97½ Dec	0	41½ Mch	68¾ Nov	0	31½ Jan	65⅜ Nov	36	595	669
1905		82	91½	5	95 May	102½ Sep	0	57¾ May	72⅜ Feb	5	60 Jan	118½ Feb	40	595	702
1906		85	91¾	5	93½ Dec	103 Jan	2½	61 May	97½ Sep	5	68½ Jul	97½ Jan	40	505	700
1907		50	56	4	29½ Nov	94½ Jan	5½	63¼ Oct	96¼ Jan	5	26 Oct	77¾ Jan	40	390	564
1908				0	25½ Mch	63½ Dec	6	66¼ Feb	122½ Dec	4	36 Jan	81¾ Nov	40	450	710
1909				0	60 Jan	75½ Dec	6	114⅝ Feb	139⅜ Aug	5¾	68 Feb	94⅝ Oct	40	635	712
1910				0	43 Jul	75 Jan	6	103¼ Jul	138¼ Jan	3¾	48¼ Dec	86½ Jan	40	585	670
1911	0	33	50	2	62 Sep	75¼ Jul	6	104½ Sep	126⅜ Jun	0	34 Sep	56¼ Feb	37	593	690
1912	0	44¾ Dec	56½ Apr	4½	68¼ Feb	86⅞ Oct	6	103½ Dec	115½ Apr	0	39¼ Jan	59¾ Sep	20	360	435
1913	1	38 Jun	49⅜ Sep	5	72 Jun	81½ Mch	6	83 Nov	110 Jan	0	23 Jul	45½ Jan	20	332	448
1914	3	45¾ Jan	58 Feb	4½	58 Dec	85¼ Feb	6	81 Dec	99½ Jan	0	19½ Jul	35 Jan	20	355	436
1915	0	30¼ Jul	43¾ Nov	2	42 Jul	65 Nov	6	81¼ Feb	104⅛ Dec	0	24 Jan	66⅞ Dec	20	385	570

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Studebaker Div $	Studebaker Low	Studebaker High	Texas & Pac. Div $	Texas & Pac. Low	Texas & Pac. High	Texas Company Div $	Texas Company Low	Texas Company High	Third Avenue Div $	Third Avenue Low	Third Avenue High	Union Pacific Div $	Union Pacific Low	Union Pacific High
1892				0	7 Jul	14 5/8 Jan				7	—	—	0	35 3/4 Dec	50 1/4 Jan
1893				0	4 3/4 Jul	11 Jan				4	140 Oct	185 Dec	0	15 1/4 Jul	42 5/8 Jan
1894				0	7 Jan	10 7/8 Aug				8	172 1/2 Jan	187 1/2 Sep	0	7 Jul	22 1/4 Mch
1895				0	6 7/8 Dec	14 5/8 Sep				9	160 Mch	190 Aug	0	4 Dec	17 1/2 May
1896				0	5 Aug	10 1/2 Dec				9 3/4	160 Nov	181 Feb	0	3 1/2 Jan	12 1/2 Nov
1897				0	8 Apr	15 Aug				8 1/4	146 May	173 Dec	0	4 1/2 Apr	26 1/2 Dec
1898				0	8 7/8 Mch	20 1/8 Dec				7 3/4	145 Oct	194 1/2 Feb	0	16 1/8 Mch	44 3/8 Dec
1899				0	12 1/4 Dec	25 5/8 Mch				6 1/2	117 3/4 Dec	242 Feb	0	38 1/8 Jun	51 1/2 Dec
1900				0	13 1/8 Jun	26 3/4 Dec				0	45 1/4 Mch	135 1/8 Jan	3 1/2	44 3/8 Jan	81 3/8 Dec
1901				0	23 1/4 Jan	52 1/4 May				0	117 May	129 1/2 Jan	4	76 May	133 May
1902				0	37 Dec	54 3/4 Sep				0	122 Jan	134 Feb	4	93 1/2 Dec	113 1/4 Aug
1903				0	20 1/4 Aug	43 5/8 Feb	10			0	100 Oct	128 7/8 Jan	4	65 3/4 Aug	104 5/8 Jan
1904				0	20 1/8 Jun	38 1/8 Nov	6			2 1/2	115 Mch	134 Oct	4	71 Mch	117 Nov
1905				0	29 3/4 Apr	41 Mch	12			5	120 Dec	141 Dec	4 1/2	113 Jan	151 3/4 Dec
1906				0	28 May	40 1/8 Oct	12			5 1/2	121 Nov	139 1/2 Jan	8	138 1/2 May	195 3/8 Sep
1907				0	17 1/2 Nov	37 1/8 Jan	15			3	16 Nov	123 Jan	10	100 Oct	183 Jan
1908				0	12 3/4 Feb	37 1/4 Dec	12			0	15 1/2 Mch	47 Aug	10	110 1/2 Mch	184 7/8 Nov
1909				0	30 Feb	40 1/4 Aug	17			0	16 Jul	42 1/2 Jan	10	172 1/2 Feb	219 Aug
1910				0	22 1/2 Jul	36 3/4 Jan	12	134 Oct	144 Oct	0	5 1/2 Jun	19 1/2 Jan	10	152 1/4 Jul	204 3/4 Jan
1911				0	19 7/8 Dec	30 1/4 Feb	10	74 1/2 Nov	136 1/2 Feb	0	{ 7 31	14 1/2 41 }	10	153 1/2 Sep	192 3/8 Jul
1912	0	30 Jul	49 1/2 Aug	0	20 1/4 Jan	26 1/4 Nov	5	81 Jan	130 5/8 Sep	0	33 1/2 Dec	49 3/4 Jan	10	150 3/4 Dec	176 3/4 Sep
1913	0	15 3/4 Dec	36 Feb	0	10 1/4 Jun	22 5/8 Jan	56	89 Jun	132 1/2 Dec	0	27 7/8 Jun	43 3/8 Sep	10	137 3/4 Jun	162 3/4 Jan
1914	0	20 Jan	36 1/4 Mch	0	11 1/4 Dec	17 3/4 Apr	8 1/2	112 Jul	149 7/8 Mch	0	33 Jul	45 3/4 Jan	9	112 Jul	164 3/8 Jan
1915	6	35 3/4 Jan	195 Oct	0	8 1/4 Jul	17 7/8 Apr	10	120 May	237 Dec	1	35 Jan	64 1/2 Oct	8	115 3/4 Jan	141 1/2 Nov

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	U. S. Ind. Alcohol			U. S. Leather, Pfd. Now, Central Leather			U. S. Rubber, 1st Pfd.			U. S. Steel			U. S. Steel, Pfd.		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892								93⅝ Dec	99 Dec						
1893							8	51 Aug	99 Jan						
1894					52½ Jun	68¾ Apr	8	80 Jan	99 Dec						
1895				6	58 Feb	97¾ May	8	75 Dec	98½ Jun						
1896				1	41½ Aug	69⅛ Feb	8	65 Oct	89 Jan						
1897				4	50 Apr	72 Sep	6	50 Jul	76⅞ Jan						
1898				4¾	53¾ Mch	75½ Dec	8	60 Mch	113¼ Dec						
1899				5	64½ Dec	84½ Nov	8	99¾ Dec	121 Jul						
1900				6	65 Jun	79¼ Nov	8	74½ Dec	104¾ Jan						
1901				6	69½ May	83¾ Aug	1	47 Oct	85 Jan	2	24 May	55 Apr	3½	69 May	101⅞ Apr
1902				6	79⅞ Jan	91¼ Sep	0	49½ Dec	64 Mch	4	29¾ Dec	46¾ Jan	7	79 Dec	97¾ Jan
1903				6	71½ Oct	96¾ May	0	30¼ Jul	58 Feb	3½	10 Nov	39⅞ Feb	7	49¾ Nov	89¾ Jan
1904				6	75⅝ Jan	106½ Dec	4½	41 Jan	100 Dec	0	8⅜ May	33⅛ Dec	7	51¼ May	95⅝ Dec
1905				6	100⅞ Jan	119 Nov	8	98⅜ Jan	118½ Apr	0	24⅞ May	43¼ Dec	7	90¾ May	107 Dec
1906				7	103¾ Jul	117 Feb	8	104¾ Jul	115 Jan	1½	32⅝ Jul	50¼ Oct	7	98¾ Jul	113¼ Jan
1907				7	68 Nov	102 Feb	8	62 Oct	109⅞ Jan	2	21⅞ Oct	50⅜ Jan	7	79⅛ Nov	107¾ Jan
1908				7	75¾ Jan	102 Dec	8	76 Feb	108 Dec	2	25¾ Jan	58¾ Nov	7	87½ Jan	114⅝ Nov
1909				7	99¾ Apr	111 Sep	8	98 Jan	123½ Aug	2¾	41¼ Feb	94⅞ Oct	7	107 Feb	131 Oct
1910				7	99¼ Jul	109¼ Mch	8	99 Jul	116½ Jan	5½	61⅛ Jul	91 Jan	7	110½ Jul	125⅜ Jan
1911	0	24 Aug	30 May	7	88¼ Apr	105 Feb	8	104 Sep	115½ Jul	5	50 Oct	82⅛ Feb		103 Oct	120⅞ Feb
1912	0	26 Jan	57¼ Sep	7	80 Feb	100½ Oct	8	105⅝ Jul	116 May	5	58¼ Feb	80¾ Sep		107 Dec	117 Aug
1913	0	25 Jun	44 Jan	7	88 Jun	97¼ Mch	8	98 Jun	109¾ Apr	5	49⅞ Jun	69⅛ Jan		102½ Jun	110¾ Jan
1914	0	15 Dec	20 Apr	7	94⅞ Jan	104 Jul	8	95⅛ Jul	104⅝ Jan	4¼	48 Dec	67¼ Feb		103¼ Dec	112¾ Jan
1915	0	15 Jan	131¾ Dec	7	100⅜ Jan	110½ Nov	8	101⅜ Feb	110 Apr	0	38 Feb	89½ Dec		102 Feb	117 Oct

RANGE OF LEADING STOCKS FOR TWENTY-FOUR YEARS

Years	Va.-Car. Chemical			Wabash, Pfd.			Western Union			Westinghouse			Willys-Overland		
	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High	Div $	Low	High
1892		93⅝ Dec	99 Dec	0	22¾ Jun	33½ Jan	5	82 Jan	100⅜ Aug		29 Apr	39¼ Nov			
1893	8	51 Aug	99 Jan	0	10 Jul	26¼ Feb	5	67⅛ Jul	101 Jan		10 Sep	37½ Apr			
1894	8	80 Jan	99 Dec	0	12½ Jan	18⅝ Apr	5	80⅞ Jan	92½ Sep		36¼ Jun	39 Apr			
1895	8	75 Dec	98½ Jun	0	12⅜ Jan	26½ Sep	5	82½ Dec	95⅜ Sep		12½ May	12½ May			
1896	8	65 Oct	89 Jan	0	11 Aug	19¾ Feb	5	72¾ Aug	90½ Nov		13 Jun	13 Jun			
1897	6	50 Jul	76⅞ Jan	0	11½ Apr	24⅜ Sep	5	75⅜ May	96¾ Sep		—	—			
1898	8	60 Mch	113¼ Dec	0	14¼ Mch	24¼ Aug	5	82¼ Mch	95⅞ Aug		31⅞ Sep	34⅜ Sep			
1899	8	99¾ Dec	121 Jul	0	19 May	25½ Apr	5	82 Dec	98½ Jan		—	—			
1900	8	74½ Dec	104¾ Jan	0	16 Sep	27 Dec	5	77½ Jun	88½ Jan		—	—			
1901	4	51 Jul	72 Apr	0	23¾ Jan	46⅛ Jun	5	81 Jan	100½ May		72½ Nov	90 Dec			
1902	4½	54 Dec	76⅜ Apr	0	37 Dec	54½ Sep	5	84¾ Jul	97½ Aug		84¾ Jan	116½ Sep			
1903	2½	17½ Sep	66⅝ Feb	0	27½ Sep	55¼ Feb	5	80¼ Sep	93 Jan		65 Oct	110½ Jan			
1904	0	22¾ Jun	44⅛ Dec	0	32¾ Mch	48⅛ Nov	5	85 May	94½ Dec	5	76½ May	92½ Dec			
1905	0	28¾ Sep	58⅝ Dec	0	37 May	48 Feb	5	92 Jan	95½ Jun	5	76 May	92 Apr			
1906	0	31 Jul	58 Jan	0	36½ Dec	53⅝ Feb	5	83¾ Dec	94¼ Jan	5	75 Dec	88 Apr			
1907	0	12½ Nov	39⅜ Jan	0	14⅛ Nov	38½ Jan	5	54 Dec	85 Jan	5	16 Nov	77 Jan			
1908	0	16 Feb	45¾ Dec	0	13 Mch	52¾ Dec	3½	41 Feb	71¾ Nov	0	19 Mch	47 Nov			
1909	3	40⅞ Feb	56⅜ Dec	0	41 Feb	61¾ Jun	3	64 Feb	85¼ Nov	0	37 Feb	45 Aug			
1910	2½	47 Feb	66⅛ Oct	0	28⅛ Jul	61 Jan	3	56 Jul	78½ Mch	0	24¾ Jul	41¼ Jan			
1911	4	43⅛ Sep	70⅜ Feb	0	14¼ Dec	40⅜ Feb	3	71⅝ Apr	84½ May	0	29⅜ Sep	39½ May			
1912	3	40¾ Dec	57¼ Jan	0	12⅜ Jun	22⅞ Apr	3	71¾ Dec	86¼ Jan	1	33⅛ Jan	44¾ Aug		67½	72
1913	1½	22 Jul	43⅛ Jan	0	6⅛ Jul	13¼ Jan	3	54⅛ Dec	75⅛ Jan	2	26⅞ Jun	39⅝ Jan	6	50	69¾
1914	0	17 Dec	34⅞ Mch	0	1¾ Dec	13 Jan	3¾	53⅜ Jul	66⅞ Feb	2	32 Jan	39¾ Jul	11	58	91½
1915	2	15 Jan	52 Oct	0	43⅞ Oct	49¼ Nov	4½	57 Jan	90 Nov	6	32 Feb	74⅞ Oct	11	87	268

XXI

SURPLUS DEPOSITS AND INTEREST RATES

In previous editions of this book, statistical tables were printed setting forth the surplus deposits of the National and State banks (omitting trust companies) in the New York Clearing House, for each week of the year for a series of years. It is not necessary to print the statistics in that elaborate form. It is desirable, however, to retain the record; and the tabulation is now given in brief. Extreme points of high and low of surplus deposits will be sufficient for a clear understanding of the importance of this subject. In the condensed tabulation which follows, surplus deposits are stated in round numbers. Where a minus sign is prefixed to the figures, the loans are in excess of deposits. When deposits are less than loans, there is apt to be a deficit in bank reserves, although manipulation occasionally prevents this. The following comments should be compared with the tables for those years on the succeeding pages.

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 Aires 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. Simultaneously, surplus reserves almost vanished also, falling to $539,050 on October 15th. 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 May, 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 deposits and rise in interest rates. For six weeks, July 29th to September 2d, there was a deficit in bank reserves of from $1,256,550 to $16,545,375. 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. The stock market of 1894 was a trading affair, with 10 and 20 point movements back and forth.

1895

SURPLUS deposits were ample and interest rates moderate until the last three months. Heavy buying of stocks for a bull movement took place in June, 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. Sudden flurries of this character are always possible, no matter what the banking position is.

1896

THERE was steady depletion of banking resources in 1896 and surplus deposits fell below zero, although bank reserves did not, 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 declined heavily into August, 1896. In November they 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 for those times 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 in stocks.

1899

Stocks rose steadily under the influence of phenomenal surplus deposits, 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. For three weeks in November, surplus reserves fell between $312,025 and $2,788,950 below zero. 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. Some of those long of stocks were tired out this year by the sluggish and inert market, and in June others were 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 there were several flurries in interest rates, 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. The banks were in strong shape, all the year.

1902

There was a great rise in stocks in 1902 until August. 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 went above the legal rate. There was a $1,642,050 deficit in surplus reserves, September 20th. It became imperative for the banks to reduce loans and prices fell heavily after the great boom in August.

1903

The banks were heavily loaded with loans, and surplus deposits ranged below zero during forty-two of the fifty-two weeks of the year. By superhuman efforts, bank reserves were prevented from showing a deficit, although they were low. Interest rates were high, and after a handsome January rise, stocks fell until August, recovering slightly thereafter.

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, and a rise began in March, lasting until November.

1905

Surplus deposits were ample, the first half of the year, and the stock market rose to the highest average level ever known, exceeding 1864. Money was in good supply until the latter part of the year. Then depleted bank resources and high money halted the rise in stocks. Bank reserves showed a deficit of $2,428,800 on November 11th, and $1,246,525 on December 9th.

1906

The stock market reached the highest level on record in January, 1906. There were two severe breaks later. A good rally succeeded into the Fall. The boom brought on genuine financial stringency and the panic of 1907 was clearly foreshadowed by the banking position. There was a deficit of $2,560,625 in bank reserves on April 7th; $6,577,925 on September 8th; $1,514,125 on November 10th; and $6,702,175 on December 8th.

1907

Loans were in excess of deposits, the entire year. On November 29th, they were $115,000,000 below zero, a condition never before known. There were several spasms in money, in consequence. Prices fell steadily, with a rally now and then, until November 21st, when forty leading stocks were $52 a share, on the average, below the top of 1906; special stocks were down from $60 to $140 a share. The entire exhaustion of bank resources was farther shown by a deficit in reserves of between $54,540,250 and $20,170,350 every week from November 16th to December 28th.

1908

Liquidation and the halt in business corrected the strain on the banks. Money piled up in New York, and stocks rose until the month of December.

1909

Money flowed toward New York in January and surplus deposits rose to $82,700,000, remaining ample all the first half of the year. Interest rates were accordingly low, and favored the bull speculation in stocks, then in progress. Thereafter, there was steady depletion of the cash and resources of the New York banks, caused mainly by the seasonable flow of money to the cotton and grain States, but also promoted by the diminishing balance in the foreign trade and by exports of gold. While from May to December, loans decreased $165,000,000, deposits fell away $237,000,000; and at the end of December, loans were in excess of deposits by $22,900,000. Call money rose to 6 and 7 per cent and time loans to more than 4½. The situation was not favorable to a continuance of the bull speculation; and stocks began to decline.

1910

While condition of the New York banks did not favor a bull speculation in stocks, and while during most of the year loans were in excess of deposits (the excess of loans reaching $40,300,000 in November), it cannot be said, in this instance, that excessive loans were the prime cause of the heavy liquidation of securities in 1910. They contributed to the result, but that is all. The overshadowing factor was legislative and political hostility to corporations, which undermined public confidence in securities. The banks were not in a position, however, to finance an aggressive bull campaign in the stock market. July saw the lowest prices for stocks.

1911

The recovery in the stock market ran on until July, 1911, promoted by growing ease in bank resources and, be it stated, by the speculative pools, which were loaded with stocks and wished to distribute them to the public.

Public confidence in securities had been badly shaken by refusal of the Commerce Commission to permit the railroads to advance their freight rates. The pools let go the last week of July and a severe slump in stocks followed, amounting to an average of $26 a share in leading denominations. Declining resources of the banks helped the bear movement, which ended in October.

1912

LIQUIDATION had improved the condition of the banks. The rise in stocks lasted until the last day of September, when foreign liquidation, owing to the Balkan war, became insistent. Leading shares were then up in price about $30 a share on average from low in 1911. Foreign liquidation burdened the banks in New York until on December 7th, surplus deposits had fallen to minus $31,900,000. Small deficits in bank reserves were reported on July 6th, November 30th and December 7th. Stocks declined after August.

1913

MORE than half the year, twenty-nine weeks out of fifty-two, loans were in excess of deposits in New York. Stocks declined until June. An ensuing rally did not hold.

1914

NO trouble was experienced by the banks until the outbreak of war in Europe, July 28th. Foreign liquidation of American securities then led to enormous exports of gold. There was a heavy deficit in bank reserves from August 8th to October 10th, and surplus deposits fell to $108,600,000 below zero on October 10th. A fearful smash in the stock market, the last three days of July, closed all the stock exchanges in the United States.

1915

YEAR of a great bull market in industrial shares and of a moderate rise in investment issues. The new Federal Reserve system, and the large imports of gold from Europe in payment for munitions and food for the armies, caused an unprecedented expansion in bank resources. Money was easy the entire year and surplus deposits rose to $305,277,000 on November 13th. A plethora of money supplied a sound basis for the rise in stocks.

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	Jul 25	1½ to 2½	6 to 6½	$16,000,000
Jan 31	1½ to 5	4½ to 5	21,000,000	Sep 26	2 to 25	6	–3,000,000
Jun 6	2½ to 5	6	–2,500,000	Dec 26	2 to 4½	4½ to 5	26,000,000

1892

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 30	1 to 2½	3½ to 4	$56,000,000	Nov 12	5 to 8	6	$6,500,000
Apr 9	1½ to 2	3½ to 4	37,000,000	Dec 17	4 to 25	6	7,000,000
Oct 15	4½ to 10	6	8,500,000	Dec 24	3 to 40	6	6,000,000

1893

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 28	2½ to 5	4 to 4½	$33,500,000	Jul 1	4 to 74	6+1 p.c.	–$15,000,000
Mch 11	2 to 60	6	2,500,000	Jul 29	2 to 74	6+4 p.c.	–24,000,000
May 6	4 to 40	6	8,000,000	Aug 12	2 to 6	6+com.	–39,000,000
Jun 17	4 to 25	6+2 p.c.	–4,000,000	Oct 28	1 to 2½	5	36,000,000
Jun 24	3 to 25	6+2 p.c.	–8,000,000	Dec 30	¾ to 1½	2½ to 4	88,500,000

1894

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 3	½ to 1½	3 to 4	$132,000,000	Aug 25	1	3 to 4	$97,000,000
Feb 17	½ to 1½	3	90,500,000	Oct 13	1	2 to 3	90,500,000
May 5	1 to 1½	2½ to 3	113,500,000	Dec 29	1½ to 2	3 to 3½	53,500,000

1895

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 19	1 to 1½	2½ to 3	$72,000,000	Oct 12	1 to 3	4 to 4½	$26,500,000
Apr 6	2 to 3	4 to 5	20,000,000	Dec 21	1 to 100	4 to 5	27,500,000
Aug 17	¾ to 1	2½ to 3	66,000,000	Dec 28	3 to 50	6	22,500,000

1896

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 18	2 to 6	6	$48,500,000	Sep 5	3 to 12	7 to 8	–$6,000,000
Apr 4	2 to 4½	4½ to 5	16,500,000	Oct 31	6 to 127	Unwilling to lend at all	Parity
Jul 11	1 to 2	3½ to 4½	26,000,000	Nov 7	4 to 96		–3,500,000
Aug 29	3 to 15	8	–3,500,000	Dec 31	1½ to 2½	3½ to 4	39,000,000

1897

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 27	1½ to 2	3 to 3½	$76,000,000	Oct 2	2½ to 4½	4 to 5	$47,000,000
Apr 10	1½ to 2	3 to 3½	63,500,000	Dec 4	1¾ to 2	3 to 3½	68,500,000
Jul 24	1 to 1¼	2½ to 3	82,500,000	Dec 25	2 to 5½	4	58,500,000

1898

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 4	1½ to 2	3	$100,000,000	Sep 23	2 to 6½	4 to 4½	$58,000,000
Mch 11	1½ to 3	4½ to 6	77,500,000	Nov 18	1½ to 2½	3 to 3½	92,500,000
Jul 1	1 to 1½	3 to 3½	129,000,000	Dec 30	2 to 6	3 to 3½	104,500,000

1899

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 24	2 to 3	3½	$139,000,000	Sep 29	3 to 20	6	$71,000,000
Apr 7	3 to 16	4 to 4½	116,000,000	Oct 6	3 to 40	6	70,500,000
May 26	2 to 4	3 to 4	144,000,000	Nov 3	4 to 35	6	60,000,000
Jun 2	1½ to 3	3 to 3½	143,500,000	Dec 22	2 to 186	6	67,000,000

1900

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 2	2 to 3	4 to 4½	$96,000,000	Aug 3	1¼ to 1½	4 to 4½	$90,500,000
Mch 23	3 to 6	5	60,500,000	Nov 9	1 to 25	4½ to 5	45,500,000
Jun 1	1½ to 2	3½ to 4	87,500,000	Dec 14	3 to 6	4¾ to 5	50,000,000

1901

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 8	1¾ to 2½	3½ to 4	$99,000,000	Jul 19	1 to 5	4½ to 5	$83,000,000
May 10	3 to 75	4½ to 5	80,000,000	Sep 13	2 to 10	5 to 5½	59,000,000
Jun 28	3½ to 15	4	79,000,000	Dec 20	2½ to 10	5 to 5½	47,000,000

1902

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 7	2¼ to 3	4½ to 5	$82,000,000	Oct 17	5 to 18	7	–$2,000,000
May 9	5 to 25	4¾ to 5	58,500,000	Oct 31	3½ to 7	6	15,000,000
Oct 3	3 to 35	6 to 7	Parity	Dec 26	5½ to 13	6	–9,500,000

1903

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 30	2½ to 4	4½ to 5	$27,000,000	Jul 3	2 to 10	4½ to 5½	–$13,500,000
Mch 20	4 to 7	5½ to 5¾	–11,000,000	Jul 31	1 to 3	4½ to 6	1,000,000
Apr 3	5½ to 15	5¼ to 5½	–5,000,000	Nov 20	4 to 8	5 to 5½	–40,000,000
Jun 5	1½ to 4½	5 to 6	–16,500,000	Dec 4	5½ to 9	5½ to 6	–39,000,000

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	Aug 12	⅞ to 1	3 to 3½	$110,500,000
Mch 4	1½ to 2	3½ to 4¼	40,500,000	Aug 19	½ to 1	3 to 3½	110,000,000
May 6	½ to 1½	2½ to 4	60,500,000	Dec 30	2½ to 5	3¼ to 3½	37,000,000

1905

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 27	1¾ to 2	3¼ to 3½	$74,000,000	Nov 17	4 to 25	5½ to 6	–$18,000,000
Apr 7	2½ to 4¼	3½ to 4	37,500,000	Dec 8	4 to 27	5½ to 6	–24,000,000
Jul 28	1¾ to 2	3¼ to 4	55,000,000	Dec 29	6 to 125	5½ to 6	–23,500,000

1906

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 26	3½ to 4½	4½ to 5	$ 6,000,000	Sep 7	2 to 40	6 to 8	–$37,500,000
Apr 6	5¾ to 30	5 to 5¼	–29,000,000	Sep 14	3 to 12	6 to 7½	–31,000,000
Apr 13	2 to 25	6 to 6½	–27,400,000	Dec 7	2 to 36	6 to 7	–62,500,000
Jul 27	2 to 2½	4¾ to 5¾	1,700,000	Dec 28	3 to 18	6 to 7	–51,600,000

1907

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 4	2 to 25	6 to 7	–$49,000,000	Jul 26	2 to 3	5 to 6	–$28,000,000
Mch 15	3½ to 25	6 to 7	–49,000,000	Oct 25	5 to 125	6 to 7	–64,000,000
May 31	1¼ to 2½	4 to 5½	–11,000,000	Nov 1	3 to 75	6 to 7	–96,600,000
Jul 5	5 to 16	5 to 5¾	–37,000,000	Nov 29	3 to 12	6 to 8	–115,000,000

1908

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 3	5 to 20	6 to 7	–$84,000,000	Aug 28	¾ to 1¼	3 to 3¾	$104,800,000
Mch 6	1¾ to 2	4 to 5	11,000,000	Nov 13	1 to 3	3½ to 4	75,000,000
Jun 26	1 to 1¾	3 to 4	89,000,000	Dec 18	2 to 4½	3½ to 4	53,000,000

1909

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 22	1½ to 2	3 to 3½	$82,700,000	Oct 29	3 to 4½	4¾ to 5	Parity
Apr 9	1½ to 2	2¾ to 3¾	43,800,000	Dec 3	4 to 6	4½ to 4¾	–$24,000,000
Jul 2	1¾ to 2	2¾ to 3¾	79,100,000	Dec 31	4½ to 7	4¼	–22,900,000

1910

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 28	1¾ to 3½	4 to 4¼	$22,300,000	Jul 8	2 to 3¼	4¼ to 5	–$23,400,000
Apr 29	2½ to 7	4¼ to 5	–22,900,000	Aug 19	1 to 1¾	4 to 4¾	37,000,000
Jul 1	2¼ to 3½	3½ to 4½	–17,200,000	Nov 11	2½ to 4¾	4½ to 4¾	–40,300,000

1911

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 6	2¼ to 6	3¾ to 4	–$24,800,000	Jun 24	2 to 2½	2¾ to 3¾	$67,900,000
Feb 25	1¾ to 2⅜	3 to 3¾	41,500,000	Aug 25	1¾ to 2½	3¼ to 3¾	46,500,000
Apr 29	2 to 2½	2¾ to 4	57,200,000	Dec 9	4 to 5¼	4 to 4½	–14,900,000

1912

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Feb 3	1¾ to 2⅜	3 to 4	$76,800,000	Aug 24	2¼ to 3	4¼ to 4¾	$36,100,000
Apr 13	3 to 4	3½ to 4	16,700,000	Nov 30	3 to 20	5½ to 6	–26,200,000
Jun 15	2 to 3	3 to 4	57,500,000	Dec 7	3 to 16	5¾ to 6	–31,900,000

1913

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 24	2 to 3	4 to 4¼	$28,971,000	Oct 31	2⅞ to 10	4¾ to 5¼	–$19,546,000
Mch 22	2½ to 6	5¼ to 5¾	–11,285,000	Nov 8	2 to 6	4¾ to 5	–21,732,000
Apr 4	2½ to 7	4 to 4½	–7,557,000	Nov 28	2¾ to 10	4¾ to 5	–18,277,000
Jun 27	1 to 2½	4¼ to 5½	25,176,000	Dec 6	2½ to 8	5	–30,347,000

1914

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 3	4½ to 10	4½ to 5	–$15,500,000	Aug 7	6 to 8	6 to 7	–$10,900,000
Feb 21	1⅜ to 2	3 to 3½	63,900,000	Sep 5	6 to 8	6 to 8	–107,700,000
Jun 6	1½ to 2	2½ to 3	98,800,000	Oct 10	6 to 8	6 to 8	–108,600,000
Jul 25	1¾ to 2½	3½ to 4¼	47,900,000	Dec 26	2½ to 3	3¾ to 4	28,300,000

1915

Week Ending	Call Loans	Time Loans	Surplus Deposits	Week Ending	Call Loans	Time Loans	Surplus Deposits
Jan 9	2 to 3	$3\frac{1}{2}$ to 4	–$ 9,300,000	Jul 10	$1\frac{1}{2}$ to 2	$2\frac{3}{4}$ to $3\frac{1}{4}$	$111,800,000
Apr 24	$1\frac{3}{4}$ to $2\frac{1}{2}$	$3\frac{1}{4}$ to $3\frac{1}{2}$	111,800,000	Sep 18	$1\frac{3}{4}$ to 2	3 to $3\frac{1}{4}$	200,742,000
May 8	$1\frac{3}{4}$ to $2\frac{1}{2}$	3 to $3\frac{1}{4}$	90,400,000	Nov 13	$1\frac{3}{4}$ to 2	$2\frac{3}{4}$ to 3	305,277,000
Jun 26	$1\frac{1}{2}$ to 2	$2\frac{3}{4}$ to $3\frac{1}{4}$	149,500,000	Dec 31	$1\frac{1}{2}$ to $2\frac{1}{4}$	$2\frac{3}{4}$ to 3	200,125,000

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From the beginning, it became apparent that the author must decide at once, whether he would help "play the game" for predatory interests in Wall Street, or devote himself exclusively to the advantage of his correspondents. He chose the latter course; and he is able to say truthfully and without reserve, that he has never had any business relations with, nor placed himself under the influence of, any of those perfidious interests, which prey upon the public or seek to exploit the Security Markets for their own advantage and to the undoing of the owners of private capital. His labors are, and always have been, devoted exclusively to the pecuniary advantage of his clients.

Young men, professional men, and others at the outset of their careers as investors, and before they have gained experience, need protection against the wiles of unscrupulous manipulators of the security markets. But they are, by no means, the only ones. Many of the clients of the undersigned are men of large means, whose names would be recognized, if it were proper to publish them, as successful leaders in industry and trade. Through intercourse and correspondence with hundreds of such men, a singular fact has come to light. Only too often, men of distinct sagacity and ability, whose energy and self-reliance have enabled them to make fortunes in their respective vocations, overlook some vital fact or betray a lack of full knowledge in making their choice of securities and especially in the prices which they pay for Stocks and Bonds. The tendency is to buy at the top, during booms and periods of prosperity and excitement, which leaves the investor in a position, where he is never able to extricate his invested capital without serious loss. Or, he takes fright, and sells out, at the precise time when he should invest. The explanation is, of course, that every man in these times is a specialist. The person who devotes his life, wholly and successfully, to the manufacture or sale of high grade steel, or glass, or textile goods, or the mining of metals, is frequently compelled by the stress of competition and the other exigencies of business to neglect the study of those influences, which affect the future value of securities. The study of conditions and securities is of itself a sufficient life work for any man. These circumstances create a field of considerable usefulness for an honest and competent specialist in security values. Every one, who is wholly engrossed in practical business or a profession, will therefore find it advantageous to supplement his own information, and correct his own judgment, by obtaining whatever facts and suggestions can be supplied by a capable and honest specialist in security values, before he invests his money in securities. For the benefit of all such persons, the author has established a Market Service, which will be described in detail to those who make application for the facts.

The spirit and aim of the Market Service referred to is efficiency in the management of capital, invested or placed at risk in securities. A long study of the methods and practices of both the successful and the unsuccessful in Investment and Speculation, and of the men who make a business of manipulating the Market, enables the author to guide the possessors of capital by means of that Market Service to a course which, if followed, will secure the results mentioned in Chapter I of this book.

The Security Markets are never stationary for more than a week or a month at a time. At all other times, prices are in motion, up or down. Standard Stocks commonly change in value from $20 to $50 each per share in the course of every year. These fluctuations occur, regularly, whether you, as possessor of surplus capital, take advantage of them or not. They can be taken advantage of by you, if properly guided or if you have had sufficient experience. Yet the course of procedure of only too many of the persons who enter the Stock Market is absolutely unscientific and detrimental. The writer claims to be one of the best informed specialists in the United States with respect to four fundamental matters, to wit:

Buying the right securities.

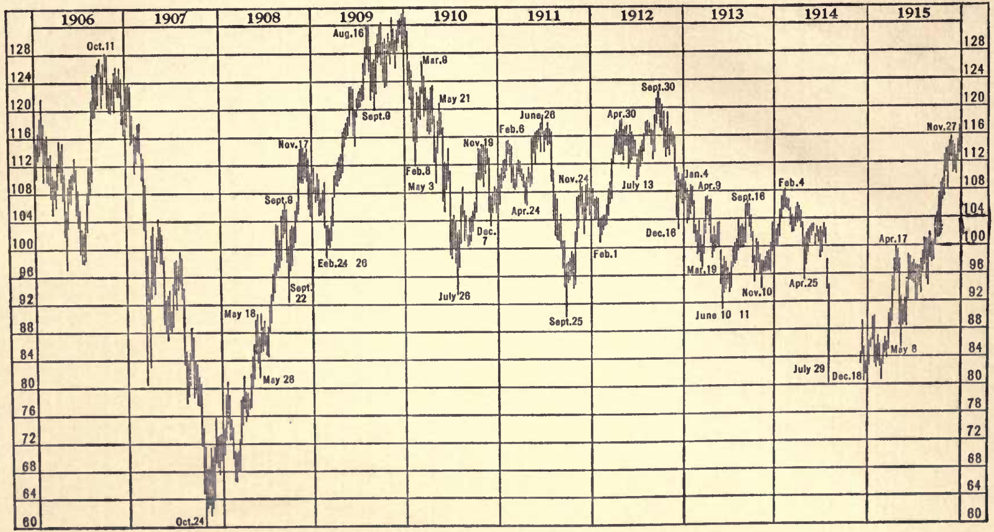
Buying at the right time.

Ability to tell how far the Market will go when it starts up or down.

Judgment when to sell in order to conserve capital and profits.

Upon another page is set forth a diagram, which exhibits the high and low prices, by weeks (on average), of the six actual leaders of the Stock Market since 1906 inclusive. These leaders are Union Pacific, Reading, Southern Pacific, Anaconda Copper (formerly Amalgamated Copper), United States Steel, and American Smelting. The ability of this office to select the moments, at which to buy and sell, is illustrated by the fact that all the important turns in prices were predicted in the author's Market Service at the dates, printed in the diagram. In 1907, no effort was made to call any of the transient turns in prices, until final culmination of the long Panic.

You are invited to correspond with this office.



High and Low, by Weeks, of Average Price of 6 leading Stocks since 1906.

The whole Stock Market has followed the same path as the leaders. The office of Henry Hall has called every important turn in prices, since 1906, at or close to the dates printed in the diagram.