## THE DOWNFALL

By Roger W. Batson. UR first epoch, culminating in 1837, was one of great activity in land; values became greatly overflated and, after about twenty years of constantly increasing prices, this period culminated in the panic of 1837. After a few years of extreme duliness, business again began to improve, during which time banks were established throughout the country in great numbers. This was the era of the United States Bank and the various State banks; the time when banking in this country received its first great impetus. These banks, however, were created too rapidly, and, being void of any adequate supervision, resulted in a wretched monetary system. Therefore, in 1857 the structure fell,

the close of the last article on Feb. 5. After 1857 we had three or four years of intense duliness during which time all new building enterprises came almost to a standstill. Iron fell during these four years more than \$9 a ton and new railroad building fell from 3,600 miles in 1856 to 650 miles in 1861. During this time the slavery question was of course very important, continual threats of secession were rumored, and politics were in a very unsatisfactory state. In fact, there was little improvement during these few years, and when President Lincoln was elected in November, 1880, and Fort Sumter was fired upon the following Spring, the final crash came in 1861.

and great was the crash thereof. This is

the point where we left the country at

Now there are many features which I desire to emphasize in these articles, and the three most important are as follows: 1. It is not necessary to have twenty years between great crises. It is true that twenty years existed between 1837 and 1857, but only sixteen years existed between 1857 and 1873.

2. There usually is an intermediate panic midway in the twenty-year periods. This was illustrated in 1846 midway between, the crisis of 1837 and 1857, and again, as we will see, in 1864-65 midway between the crisis of 1857 and that of

3. The third feature which I wish to emphasize is that these "crises" are not confined to one definite year, but seem to be divided into two divisions, and these two divisions are about three years apart. For instance, we hear about the crisis of 1857, as if all of the difficulty was confined to said year, but the following four years were also years of extreme dullness, which were followed by a semipanic in 1861. This secondary panic was necessary to clear the air and provide a foundation on which to erect a structure of prosperity. After this secondary panic, in every instance the situation has apparently been cleared and we are ready for a period of real improvement.

This was brought about in 1861 by the nation taking a decided stand regarding the slavery question. History shows that uncertainty is much more dangerous than the truth, however it may appear. In other words, fear causes more trouble than actual execution. Whether this is to be true relative to the rate decision of the past week is a question to be watched with interest; certainly the country is much better off to have the commission render a decision against the railroads than to have had them "straddle" and leave the matter still unsettled. As in the case of many other periods of improvement, the great improvement commencing 1861 started with the enactment on March 2 of the Morrill protective tariff, and it is for this reason that I so dislike to see our present tariff tampered

So far as my study of history goes, in nearly every instance where a protective tariff has been enacted it has been the beginning of a period of prosperity; while in nearly every instance where a protective tariff has been tampered with, it has been the beginning of a period of depression. Therefore, even although handicapped by the great civil war, there followed three years of real prosperity, during which manufacturing developed, our banking system expanded, our relations abroad were strengthened, and the average price of active stocks increased from \$60 in 1861 to about \$140 in 1864. It, however, is clearly evident that this speed was too rapid. Conditions had been pushed too far and we had the semipanic suggested above. In fact, these stocks fell in 1864-65 to about \$120, at which figure they continued to sell for

about five years.

Numerous causes contributed to make this period of improvement one of the most unique in the history of the country. A long and devastating war (financially, commercially, and morally) had been in progress, and the return of more than 1,000,000 men to mercantile pursuits pushed expansion to the utmost limit. Our country had just begun to arouse itself industrially, like some mighty giant when the war suddenly brought a tremendous check to such awakening; but now on the other hand were seen evidences of a colossal expansion on a scale that seemed destined to make up for lost time. The opening of the Suez Canal in 1869 was far reaching in its economic in fluence. One writer says that it was "probably productive of more immediate and serious economic changes-industrial, commercial, and financial—than any other event of this century, a period of extensive war excepted." It destroyed immense quantities of what had previously been regarded as wealth, and changed the investment of millions and millions of capital in such a way as to be no inconsiderable cause for a world-wide disturb ance. Here again is something to think of in connection with the opening of our great Panama Canal in 1915. From 1866 on, hundreds of factory, in-

dustrial, and commercial propositions sprang into being simultaneously. In fact, it seemed to be a race to prosperity in which "the survival of the fittest' was the slogan that spurred the participants on. Immigration increased with leaps and bounds, the few years succeeding 1865 being practically double that of the same period during the war. Many of the immigrants settled in the great West, which was just now expanding in an enormous way.

Railroad promotion, that ever-present and pre-eminently important feature of our industrial and National progress, interrupted after its early growth from 1840, now sprang into activity with redoubled energy. Tremendous areas of land were opened up, and I wish to call especial attention to the fact that the enormous sums of money used for this expansion were far more than the immediate returns upon the investment warranted, as is the case in some sections of the Pacific Coast at the present time. New miles of railroad construction increased from about 1,200 miles in 1865 to over 7,000 in 1870—an astounding enlargement of about 500 per cent. Capital was sunk with a reckless disregard for future returns in the endeavor to open the great grain, belts of the country, which, together with the development of similar large grain industries in South America and Russia, of course revolutionized the price of cereals, and profoundly disturbed the agricultural interests. Here again is something to think of in connection with

## Roger W. Babson Tells of the Rise and Fall of the Great Railroad Dynasties---Nation's Third Business Epoch, 1857 to 1873.

the awakening of the Chinese Empire now in progress, not to mention the new Canada.

To bring to mind more forcibly the stupendous activity of our progress at this period, I wish to note that an official report in 1869 declared that "within five years more cotton spindles had been put in motion, more iron furnaces erected, more iron smelted, more bars rolled, more steel made, more coal and copper mined, more lumber sawn and hewn, more houses and shops constructed, more manufactories of different kinds started, and more petroleum collected, refined and exported than during any equal period in the history of the country, and that this increase had been at a more rapid rate than the growth of population."

Another economic feature which sometimes has been lost sight of, and which I most emphatically wish to emphasize, in the light of our present great extravagance as a people, is the fact that the manner of living during this period was on a scale never before known.

Out of the privation and economies of a most drastic war, with the continual advent of new inventions and improvements placing the conveniences of life on a more and more elaborate plane, our people were not content to live as simply as heretofore. Released from the blight and suspense of a long struggle, with activity abounding on every hand, a new style of living was adopted, whether based on increased income or not.

Then, too, these new inventions sent the machines of a year ago to the junkheap, and these later machines, engines, and even ships in a year or two became a thing of the past, to make way for something more up-to-date. All of which cannot help reminding one of the "automobile era" in which we live to-day. These conditions, however, received a distinct shock in 1869, when the average price of active stocks dropped \$25 a share, and stocks continued to fluctuate between \$90 and \$100 a share until 1873, when they had their final drop, about \$30 more, to an average price of \$67 a share. In fact, the more I study history the more it seems as if most of our greatest crises were preceded about three years by a severe warning, and that it took another period of about three years after the main crisis before the readjustment was completed. In other words, it has taken about six years to properly readjust

It is scarcely true, however, that the crisis which followed this great era of expansion was due to a weak condition of our banking system. In the panic of 1857, which I have described in a previous article, a serious banking trouble was discovered in connection with our railroad building. Of course, where the general business situation is so over-inflated, as I have already suggested, the quality of loans must needs be somewhat impaired; but, on the whole, the banking situation was generally sound in 1869-1873. Few banks failed in 1873, and the failures that occurred involved little loss. to the creditors. The banks held large cash reserves, and whatever defects were discernible were due more to an imperfect organization of the banking system than any other cause.

To quote from Prof. Sprague's "History of Crises."—"It will be seen that in 1869 the banks were exceedingly strong in cash reserves, holding nearly 28 per cent. in proportion to their deposits. Notwithstanding the considerable increase in deposit liabilities and the slight reduction in cash holdings, the proportion of reserve was reduced to only 23 per cent. in 1873. There was a slow but continuous increase in loans from \$273,000,000 in April to \$299,000,000 on Aug. 12, 1872. Continued ease prevailed, and shortly after the middle of the month it was reported that 'the money market for August has been unusually quiet, with an ample supply of money on call, and seeking investments in commercial paper, and in railroad securities."

"The banks were in what was for them a normal condition of strength at the time. The breakdown of the credit machinery of the country could not be attributed to any unaccustomed lack of preparation. The defects which appeared were characteristic of the system." Here again is a suggestion that may be worth while considering in connection with the low money rates now existing for prime loans. Although unsatisfactory conditions are often signified by high money

rates, yet such rates are not an infallible sign of future trouble, nor are they a necessary sign. I suggested above that most of our great crises have been followed in about three or four years by another panic. Possibly this is not the correct method of statement, as sometimes a great crisis has

been preceded by a panic some three years previous. This is very well illustrated in the case of the panic of 1873, which was preceded by "Black Friday" in Sep-As has been the case in all periods of

prosperity, some classes of people are not content to let well enough alone, and in this case it was the speculators and promotors of Wall Street. The panic of 1873 was to a great extent precipitated by unscrupulous and unprincipled men. Although business inflation was carried to a high point yet all this inflation might have been taken care of by a gradual liquidation in land, labor, commodities. and securities if designing operators had not carried things through with a high hand. Production was being carried forward at an alarming rate.

War is demoralizing to the moral condition of any country. In fact, it seems to me that Gen. Sherman's famous remark is quite applicable, and at the close of the war men came back to mercantile occupations seemingly imbued with the same insane desire to attack and kill their fellow-men in a commercial way as they had been imbued in a material way in the few years before.

Religion, of course, was at a low ebb, as is always the case when a bloody conflict rages, and the battle cry in Wall Street was "war to the knife." Black Friday, above referred to, was a direct consequence of such unprincipled, unrighteous tactics as were the order of the day in many quarters of the financial world. In fact, a few daring speculators conceived the idea of cornering the country's

gold supply.

For several years gold had been sold by the United States Treasury department privately; but in 1868 it was decided to auction off this gold to the highest bidder. I am glad to say that many financial men in Wall Street promptly protested, on the ground that the gold market should not be controlled by speculators; but nevertheless such auctioning

continued. The buying and selling of gold as a commodity centred in New York, and the transactions became of such magnitude



Jay Gould.

that the "Gold Room" next door to the Stock Exchange became a regular institution in financial circles, the gold quotations being carefully watched by the business men all over the country. Of course, it occurred to the speculators above mentioned that they could corner this gold supply, and by extraordinary influence and suggestions as to the wisdom of the Treasury Department in keeping up the price of gold during the Fall to assist in moving the crops they accom-

The crash came in September, 1869, and in a few days the premium on gold ran up from 130 to 162, and then immediately fell to 135. Many were sadly and irretrievably ruined by this stupendous outrage, and "Black Friday" will go down in history as a day of horror to many. The Gold Exchange Bank went into the hands of receivers and closed its doors for several days.

Speculation continued. In fact, this was one of the worst periods morally, commercially, and financially, as regards unreasonable methods of expansion that our country has ever known. In spite of the warnings from time to time, and especially the great warning of Black Friday, people continued in their competitive craze for getting money. Whether honestly or not, it seemed to make little difference.

Great sums of money and large fortunes were absorbed in railroad and industrial expansion. It seemed that the American people, after the troublesome period through which they had just passed, now thought that there never would be a reckoning day again. Railroad systems were used for the benefit of those in control. Financial pirates would gain possession of the road, and by watering the stock, declaration of extra dividends, manipulation of the market. &c., would almost wreck the property and take the spoils for themselves.

A few consolidations, however, were effected, such as the New York Central with the Hudson River Railroad; but these consolidations only caused the public to feel that matters were in a stronger position. The students of fundamental conditions, however, knew that the era of prosperity was now drawing rapidly to a close, and were, needless to say, preparing for the storm ahead.

The origin of the Missouri Pacific dates back to 1849, when the Pacific Railway Company of Missouri was chartered. This corporation obtained powers to build a railway from St. Louis to Kansas City, as well as a branch penetrating into the southwestern part of Missouri, and received State aid in the shape of an advance of \$7,000,000, in addition to a land grant of about 1,600,000 acres.

Construction proceeded very slowly, and the road to Kansas City, 283 miles long, was not completed before 1865. The branch leading southwest and part of the land grant belonging thereto were confiscated by the State of Missouri in 1866 because of the non-payment of interest on the advance of the \$7,000,000 above referred to.

In 1868, however, the Legislature passed a compromise act in accordance with the terms of which the Government accepted a cash payment of \$5,000,000 in settlement of all its claims. The confiscated property was sold to that part of the Atlantic & Pacific Railroad Company which is now the St. Louis & San Francisco, but this corporation leased it to its builder in 1872 Four years later, however, it was sold in foreclosure, and purchased by the Pacific Railroad of Missouri.

The old Missouri Pacific defaulted in 1875, and was sold under foreclosure, and then came under the absolute control of Gould interests and has since so remained. unless there has been a change during the last few weeks. In 1881 the Missouri Pacific practically absorbed the St. Louis, Iron Mountain & Southern, and for a time operated the Missouri, Kansas & Texas. the Texas & Pacific, and other roads under leases, these leases being afterward surrendered. In 1892 complete control of the International & Great Northern was secured, and in 1898-9 control of the Central Branch of the Union Pacific, the latter road being operated as a part of the Missouri Pacific system.

In 1901 a large interest in the Denver & Rio Grande was acquired, sufficient, with the Rockefeller holdings, it is understood. to insure control of that property. Since that time the Western Pacific has been completed to San Francisco, thus giving the owners of the Missouri Pacific control of a property from Pittsburg to the Pacific Ocean.

These lines have constituted the famous "Gould systetm," which is said to have been combined by means of some of the most daring and speculative deals ever recorded. The Missouri Pacific is said to have obtained control of most of these roads without assuming any liabilities whatsoever, and possibly for the sole purpose of manipulating the stock mar-

The companies reported and kept their earnings separately, but the Missouri Pacific could, if it saw fit, make advances in case any of the leased lines earned less than was necessary to pay its annual charges. If it refused, the lessors could terminate the lease.

Naturally, advances were only made as long as it suited Mr. Gould's purposes, and as this period apparently terminated in 1887, the leases of the Wabash and Texas & Pacific were discontinued in that year. The Missouri, Kansas & Texas separated in 1868, and the International & Great Northern was for three years owned jointly by the Missouri, Kansas & Texas and the Missouri Pacific; but an arrangement was arrived at between the two companies in accordance with which all its stock became the property of the Missouri Pacific. The lines now directly operated by the

Missouri Pacific connect St. Louis with Omaha, Lincoln, and other points in Nebraska; Pueblo (communicating with Denver by the Denver & Rio Grande Railroad) and numerous points in Kansas and Missouri, including Kansas City, St. Joseph, Atchison, and Boonville. The Iron Mountain lines give the Southwest communication with points in Missouri, Arkansas. Louisiana, and the Indian Territory, and connect with the Texas & Pacific (for El Paso and New Orleans) and with the International & Great Northern for Galveston on the Gulf and Laredo on the Mexican border. The system therefore connects all settled parts of the Southwest with St. Louis, where it meets the lines to the East via the Wabash and the Wheeling & Lake Erie. which latter road is now being so plendidly operated by Receiver Worthington. The Missouri Pacific system has always occupied a very advantageous position, having in the most important branches of its business no other rival than the Atchison, while a most promising region,

velopment, is tributary to its lines. As a result the company has survived, despite the large investments it has made in auxiliary concerns which failed to offer returns upon their capital. Its traffic approximately reached the same proportion per mile in 1891 as on the Chicago, Milwaukee & St. Paul Railway, although since that time the St. Paul and other lines have forged ahead.

which leaves vast scopes for further de-

On the Missouri Pacific proper the earnings were of a still more satisfactory nature, and during the early Gould administration were exceedingly good. In fact, as the road had neither an excessive capitalization nor heavy operating expenses, the company for a number of years apparently did well, with the result that it paid substantial dividends.

From 1880 until 1882 it declared 6 per cent. per annum, and after that 7 per cent. until 1888, in which year the quarterly payment was reduced, first to 11/2 per cent. and then to 1 per cent., being maintained at this level until October, 1891, when it was suddenly discontinued and was not resumed until 1901.

This surprise was closely connected with Mr. Gould's control, and brought about a sharp fall in the price of the stock. As far as the published accounts went, no reason could be detected why the dividends should have been suddenly dropped. The report for 1891 made no attempt at an explanation, though the income account showed a decline in "revrenue from other sources," presumably arising from failure of the Iron Mountain to pay a dividend. Why this failure occurred no outsider could discover; earnings had in all cases been normal, and hence it was generally supposed that Mr. Gould was short of the stock and had made the most liberal use of the discretion with which he was invested.

Dividends from 1901-1910 were paid as follows: In 1901, 21/2 per cent.; in 1902, 5 per cent.; in 1903, 5 per cent.; in 1904, 5 per cent.; in 1905, 5 per cent.; in 1906, 5 per cent.; in 1907, 5 per cent.; in 1908,  $2\frac{1}{2}$  per cent.: in 1909 and 1910, nothing. The range of prices since 1901 has been as follows: 1901, 69 to 125; 1902, 96 to 126: 1903, 85 to 116: 1904, 87 to 112; 1905, 94 to 111: 1906. 85 to 107: in 1907, 44\% to 92¾; in 1908, 28½ to 67½; in 1909, 65 to

77½; in 1910, 41 to 73%. The gross earnings of the Missouri Pacific in 1896 were \$22,011,961, and in 1906 they were \$44,566,821, and in 1910, \$53,-019,137. In 1896, 4,938 miles of road were operated; in 1906, 6,276, and in 1910, 6,775. It will be seen that in the ten and a half years from 1896 to 1906, the mileage increased about 25 per cent., while the gross earnings nearly doubled, while from the years 1906 to 1909 there was very little increase in either miles operated, or the gross earnings. In the year 1909, the gross increased from \$46,385,543 to \$53,-019.137. Therefore either the Gould management has been much better than the newspapers represent, or else the property

has great latent powers. The new Missouri Pacific Railway Company was organized on Aug. 9, 1909, in the States of Missouri, Kansas, and Nebraska, as a consolidation of the former Missouri Pacific Railway Company, Kansas'& Colorado Pacific Railway Company, Central Branch Railway Company, Rooks County Railroad Company, Nevada & Minden Railway Company of Missouri, Nevada & Minden Railway of Kansas, Kansas City & Southwestern Railway Company of Missouri, Kansas City & Southwestern Railway Company of Kansas, Fort Scott Central Railway Company, Kanopolis & Kansas Central Railway Company, Kansas Southwestern Railway Company, Leroy & Caney Valley Air Line Railroad. The St. Louis, Iron Mountain & Southern Railway Company was not included in the merger.

The consolidated company, therefore, now operates as follows: (1) by direct ownership; 3,781.70 miles of first main track: (2) by lease, 43.95 miles of first main track; (3) by trackage rights, 57.78 miles of first track; (4) by stock control. the St. Louis, Iron Mountain & Southern Railway Company, operating as follows: 3.129.62 miles owned, 0.59 miles leased. and 157.63 miles of trackage rights. Total operated, 7,171.27 miles of first track, located in the following States: In Missouri, 1,600.25 miles; in Kansas, 2,379.44 miles; in Nebraska, 376.84 miles; in Colorado, 152.12 miles; in Oklahoma, 161.62 miles; in Arkansas, 1,713.08 miles; in Louisiana, 574.66 miles, and in Illinois, 213.26 miles, and extends westerly and southwesterly from St. Louis, Mo., including main lines from St. Louis to Omaha, Neb., and from Kansas City, Mo., to Pueblo, Col.; also a line to Texas making connections with the line of the Texas & Pacific Railway, the International & Great Northern Railroad, and the St. Louis Southwestern Railway. In addition At practically controls the Denver & Rio Grande and the Western Pacific to San Francisco. Moreover, as the Missouri Pacific is said to own over 20 per cent. of the Wabash stock, (while the Goulds are said to own only 11 per cent.,) the control of the Missouri Pacific carries practical control of the Wabash and allied Eastern lines, which probably accounts for the great recent activity in the Wabash refunding 4 per cent. bonds.

As to the present detailed status of the company and its securities, I must refer readers to my card system, which may be found in almost every broker's office, or to my analysis of the Missouri Pacific. on page 662 of Moody's Manual for 1910, I will, however, say that it is believed that the property has great latent powers, and although the Goulds have probably done the best possible under the circumstances, yet it has the possibilities of some time becoming a second Union Pacific or Chicago, Burlington & Quincy. On the other hand, the property is now physically in poor condition, and it should take \$100,000,000 or more to place it in a state of high operating efficiency. This, moreover, will require a few years of waiting, and before the stock permanently becomes a high priced, standard dividend paying stock, it will probably sell at a lower figure than it sells for to-day. This, however, depends upon present fundamental conditions—a discussion of which I cannot here enter into.

In fact, I have herewith inserted this reference to the Missouri Pacific. first because it is of special interest to-days and secondly, to illustrate the rise and fall of the great railroad dynasties. Most of the younger business men and investors think that if a railroad stock is now paying 6 per cent. and selling above par. it is rlmost sure to continue doing so, forgetting that Atchison sold about twenty years ago for more than it does to-dan and paid higher dividends, after which fell in price to almost nothing.

Men to-day forget that Wabash was once a highly regarded guaranteed stock and sold at high prices and that consolidations now talked of actually took place about forty years ago and have since been broken up and annulled.

Therefore, although I am a great ope timist as to the ultimate future of out great country and its industries, yet see no reason why history should not continue to repeat itself to a greater of lesser extent. This means that the stock of some of our roads now selling above par will some time become almost worther less, owing to new conditions arising which we now cannot foresee, while others now selling very low will some time become very valuable.

What these roads are none of us know with certainty, and therefore the most successful investors buy and sell "the market as a whole," looking only to the average price of twenty or more stocks which they hold, basing their buying and selling solely on the study of fundamental conditions.

I, however, must return to my subject. and will continue explaining other conditions as existing during the latter part of the epoch. As to the international situation, our foreign debt accruing from the war, of course, was exceedingly heavy; so that from 1869 to 1873, in spite of the enormous grain exports, gold was being shipped to Europe at the rate of \$21,000,000 to \$63,000,000 per year.

In 1872 speculation was so rife that on Sept. 17 three "corners" were engineered in a single day—a day that will be long remembered as the "Day of Three Corners." Suddenly in the Spring of 1873 Germany was startled by a severe crisis. and soon money became tight, the Atlantic Bank became bankrupt, and the public was at last aroused. The selling and decline of stocks continued week after week, and in the Fall the New York Warehouse Company failed, as it had been unwisely induced to finance the Missouri, Kansas & Texas Railway. Within a few days, on Sept. 14, the important banking house of Kenyon, Cox & Co. failed, having indorsed the paper of the Canada Southern Railroad Company. The New York Midland became bankrupt, and then came the crash which startled the whole country in the failure of the well-known house of Jay Cooke & Co.

New York Exchange, which took the unprecedented action of closing its doors for ten days. Strong petitions were forwarded to the Treasury Department for assistance, and finally \$26,000,000 in greenbacks were issued. When Congress convened in December the stock market had started upward, but general business was still in a sad condition, and the wildest schemes were set forth for helping out the situation. More than sixty bills, resolutions, and propositions were introduced for consideration to alleviate the situation. This well illustrates that although the people will enact destructive legislation when times are fair, as at present. yet they will be sensible when times are bad, which gives us some reasonable hope that plans of the Monetary Commission will some day be adopted, even although a depression is necessary to insure its enactment.

The usual scenes were enacted on the

This panic of 1873, which was one of the most serious in the history of our country, wrecked many fortunes, severa banks, and hundreds of business men fle nancially. The Northern Pacific Railroad Company and New York, Chicago & St. Louis Railroad Company were among the roads which went into the hands of receivers, and failures increased every year until 1878. Nearly eighty members of the New York Stock Exchange succumbed during this drastic liquidation and "days of reckoning."

No doubt the superficial observer would give as a reason for this panic the Chicago fire of 1871 and the Boston fire of 1872, two of the most serious and disastrous conflagrations in the history of our country; but these were only two of the final shocks necessary to bring about the area of depression which must always follow as a consequence of the unchanging law of action and reaction. Happily, the United States Government's credit was at this time the best of any year since the war, thus saving the country from still further and more tremendous consequences.

The aftermath of this liquidation grew into depression lasting longer than any depression before or since. Much money disappeared from circulation. There were nine failures per thousand among the commercial houses, and \$15,000,000 of gold was imported. Every industry was affected. Men were thrown out of work . everywhere, commodity prices dropped 20 per cent., oftentimes with no market, and the New York Clearing House issued \$26. 565,000 certificates. Moreover, the depression was worldwide. It therefore will be seen that from 1857 to 1860 were years of depression: from 1861 to 1865 were years of improvement; from 1866 to 1870 were years of great prosperity, and from then. beginning with Black Friday, to 1872 was a period of declining prices, which period was culminated by the Chicago fire on Oct. 9, 1871, and the Boston fire on Nov. 11. 1872, and the final crash a few months later in 1873.

## POSSIBILITIES IN MAHLER SYMPHONY

TT wouldn't surprise indefatigable symphony concert goers much if some modern composer should take it into his head to compose a symphony which would require scenery and action. "Symphony in five movements for orchestra, organ, solo voices, chorus, with scenic embellishments," the programme would read. In other words the eye of the unimaginative listener would be able to drink in what his ear could not. Perhaps it was to this eye that Isadora Duncan intended to appeal when she danced to Beethoven's Seventh Symphony, which Wagner had dubbed "The Apotheosis of the Dance." Unfortunately for Miss Duncan it was not Beethoven who had given the symphony this title. Gustav Mahler has not, as yet, demanded scenery or action for his colossal symphonies, but in his last one which had a performance not long ago in Munich, he seems to have asked for everything else. In fact he has gone so far that one German publication has suggested that in his next symphony it will be necessary to have some of the musicians depending from the ceiling.

The performance of this symphony of Mr. Mahler's, which is labeled the eighth, took place in Munich under the composer's direction, and now that he will conduct the Philharmonic again next year, there is a probability that New York may hear the new work next season.

In the time of Mozart a symphonic composer was very well content to have an orchestra of forty men or so-a few strings, a few wind and percussion instruments. Beethoven rather upset some of the symphonic traditions by writing his ninth symphony, which requires a chorus and four solo voices. Liszt and Berlioz carried the symphonic upsetting of traditions a bit further. Gustav Mahler. however, has seemingly gone several steps further than any of his predecessors.

His eighth symphony lasts about an hour and three quarters. In the finales Mahler has eight trumpeters and four trombone players in addition to the regular orchestra, who all stand up in a row. at the top of the platform and blow for all they are worth into the faces of the audience. Besides these extra brass players there are in the orchestra itself four trumpets, eight horns, four trombones, a tuba, four kettledrums, and three pairs

of extra cymbals, not to mention the great organ, which also goes full blast. These in addition to the usual instruments of the orchestra and 850 voices. To enumerate exactly, the symphony demanded 7 soloists, 500 men and women chorus singers, 350 children, and an orchestra of 170 men!

"There were a lot of interesting details," writes one critic. "In the orchestra, for instance, one could note a double bassoon, elongated by the attachment of an aluminium tube two or three feet long, in order, I suppose, to secure lower tones. than possible with the ordinary instrument. The busiest bee in the hive, not excepting. Mahler himself, was the kettledrum player.

"It was a mere bagatelle for him to play two drums, one with each hand, while tuning a third with his teeth. He also had a faithful Achates, who spent most of his time tinkling triangles, ringing bells, banging big drums, etc. However, when the demands became too great even for the almost superhuman ability of the aforesaid kettledrum player, this true friend would drop his own work, sprint twenty feet across the platform, never once upsetting a music desk, snatch up a pair of sticks, and let loose on the kettledrums numbers three and four, while the first artist confined himself to numbers one and two. There was also a gentleman who played on a large concert grand piano."

Returning to this country in advance of Mahler Frederick Stock, the conductor of the Theodore Thomas Orchestra in Chicago, said that he would like to do the work there.

"I have seen few more impressive sights," said Mr. Stock, "than that presented by the huge audience in the amphitheatre and the thousand performers

on the stage. While the sensational success of the symphony was to some extent due to the wonderful manner in which the composer conducted, the work itself made a tremendous impression on me, even stronger after the second hearing than after the first. Not enough can be said. in praise of both performances.

"The work itself is not a symphony in the adopted classic sense of the term, but more a symphonic cantata, consisting of two movements, of which the first lasts

about an hour and the second about fiftyfive minutes. It is 'choral' throughout, but the treatment of both solo and choir voices is again more orchestral than vocal, for the voices are meant to be no more nor less than a part of the whole. The inward significance of the work is philosophic in its nature, the composer using for his itheme the evolution of the mere physical into the purely spiritual existence. The first movement employs for its text the invocation of the holy spirit. 'Veni, Creator Spiritus,' while the second, by way of contrast, praises the fulfillment of spiritual purification, to which the finale of the second part of Goethe's 'Faust' furnishes a most suit-

"The music itself strikes me as melodious and characteristic, the material being of modern fibre, and the treatment of the themes displaying a wonderful amount of ingenuity and power."

Performances of Mahler's symphonies have been considered as more or less momentous events when they have taken place in European cities; and they have been found so in New York, Boston, Chicago and Cincinnati. Pamphlets are emitted easily in Germany these days about disputed claims in music and they have been emitted about Mahler. His symphonies have been frantically applauded and stormily hissed. For most of them, the early ones, as well as the latest, he demands a most elaborate and sometimes eccentric orchestral apparatus, and he has used chorus and solo voices in symphonies at least twice before the

He has expressed himself in a most ferocious manner against programme music as it is pursued by modern musicians and he abhors "analytical notes." yet he acknowledges his deep indebtedness to Richard Strauss and claims his friendship. In most of his symphonies he has given the most unequivocal indications, of having followed a programme in his own mind, even if he has only let suggestions of it appear upon his score. He demands not only a huge apparatus but needs the most extreme lengths in which to develop and present his ideas. His second symphony occupies two hours and forty minutes in delivery, his fifth