S E V E N S T U D I E S I N
S T O C K M A R K E T T R A D I N G

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PRICE CURVE Bulletin & STUDIES IN STOCK MARKET TRADING

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SUPPLEMENTARY STOCK MARKET STUDY CYCLES, NO. 1

STOCK MARKET TIME-CYCLES

A KNOWLEDGE DERIVED FROM THE PAST MAKES POSSIBLE THE FORECASTS OF FUTURE TRENDS IN THE AFFAIRS OF MAN

Leaders in economics and the business world recognize that stocks, commodities, money, wages, and periods of prosperity and depression fluctuate in rhythmic impulses which appear to be regulated by some unknown immutable law. There appears to be a time-cycle for everything. The word CYCLE means a period or revolution. It is an interval or space of time in which is completed one circle of events or phenomena that recur regularly in the same sequence -- often called the law of repetition or periodicity.

The stock market flows constantly in periodic waves of buying and selling -- each wave a segment of a larger price-movement, and every price-movement a part of a complete TIME CYCLE in the making. There is a 45-year time-cycle that correlates closely with major stock market trends, and two shorter cycles of 14 and 20-year periods that correlate with secondary as well as primary trends. The major fluctuations of the two previous 45-year cycles, and that part of the current cycle which started in 1942, have correlated with the highs and lows of nearly all major price trends since 1851 -- a period of over 96 years.

The time-periods of these cycles are based on mathmetical calculations and their impulses can be projected for many years ahead. They differ from most other time-cycles in that their segments are not evenly spaced but vary in time to harmonize with natural phenomena. The 14 and 20-year cycles have always concurred with the longer 45-year cycle during periods of sustained prosperity like that of the great 5-year bull market from May 1924 to September 1929 when the Dow Jones Industrial Average advanced 292 points from a low of 88.33 to 381.17.

Fixed time-cycles of various periodicities have been explored, but none have been discovered that will coincide perfectly with all major price movements -- probably because the interplay between cycles cause the time-element of price trends to vary. If this assumption is correct our problem becomes one of combining the dynamic influences of all cycles that effect stock prices to find the best forecasting tool.

We know that our three major TIME-CYCLES will be repeated again and again, and that we can calculate the approximate time of the major tops and bottoms of each cycle; but we cannot determine the amplitude of every price movement The amplitude of a market movement is governed largely by inflationary influences at the time it occurs. However it is reasonably safe to conclude that beginning with every new 45-year time-cycle each successive bull trend will reach a new high until the cycle has reached its crest in about 30 years.

Major tops in stocks are made in approximately 7½, 15, and 30 years, and depression lows occur about 11½, 23, and 34½ years after the beginning of each 45-year cycle if there are no extenuating or sustaining influences from other cycles. The high in stocks following the cycle of 1851 occurred in 1881; the high following the 1897 cycle came in 1929.

EXPLANATION OF THE 1897-1942 TIME-CYCLE CHART

Primary trends harmonizing with the pulsations of the 45-year TIME-CYCLE are indicated by numbers and letters in circles. Tops and bottoms corresponding to the 14 and 20-year periods are marked by numbers and letters in squares. The pulsations of the 14 and 45-year cycles are illustrated below the curve of stock prices. Whenever advancing cyclical impulses were in agreement, business conditions have been good and the stock market strong; times of uncertainty and low prices occurred when cyclical impulses were at cross purposes. For example: The bullish implication of the 45-year cycle at 6 terminated near G , but prices continued to advance to an all time high of 381.17, on September 3, 1929, because of the powerful sustaining influence of the 14-year cycle which terminated on August 27, 1929.

The downward pulsation 8 , ended on May 1, 1942, and prices began to rise immediately because there was no influence to sustain the downward trend from either the 14 or 20-year cycles. Extenuating impulses have a tendency to diminish but do not cancel other long-term indications.

There was a variance of cyclical impulses at the start of World Wars 1 and 2; but in spite of these great conflicts stock prices followed the major cyclical trend. In fact the three major wars and the several economic and social changes that have occurred since 1897 have caused only temporary interruption in the Nations progress. Results show ten advancing trends and nine declines between 1897 and 1942 with long and short gains of over 1500 points in the Dow Jones Industrial Average.

The AXIS, drawn half way between the upper and lower trend lines -- excepting the abnormal amplitude of the 1929-1932 range -- shows that the secular trend is up. This is in keeping with the normal growth of the United States and this upward trend can be expected to continue for many years to come.

I believe that many investors and security experts who missed calling the top of the 1946 bull market failed to recognize the implications of the great TIME-CYCLES because of the popular practice among them to define bull and bear markets by Dow Theory concepts. The Dow Theory was never intended to be an instrument of forecast but rather a medium for confirming trends after they have been established. The tops and bottoms of major trends are timed by blending the pulsations of TIME-CYCLES and by PRICE-CURVE PLAN signals which indicate the DAYS to BUY or SELL.

The last previous major down impulse of the 45-year time-cycle terminated on May 1,1942, as shown on chart at 8 . The Dow Jones Industrial Average made its low on April 28,1942, and the Price Curve gave a buy signal on May 1, at 95.83, only 2.91 points from the bear market low. The recent bull market high was made on May 29,1946, at 212.50. The final bull cycle impulse of this series occurred on July 30,1946, and the

Price Curve gave a sell signal on August 9, at 203.53. A bulletin was mailed to all subscribers telling them that the bull market was over and to take profits on long stocks and sell short. The gain, from the time the first Price-Curve signal to buy was given on May 1,1942, to the final bull market sell signal, amounted to 107.70 points.

The 1942-1946 bull market lasted 4 years and 1 month, and the Price Curve gave 34 intermediate-term trading signals. There were 29 profits totaling 156.56 points and 5 losses amounting to 12.49 points. All buy signals showed a profit. The 5 losses came from short sales in a bull market.

THE 1942-1988 TIME-CYCLE

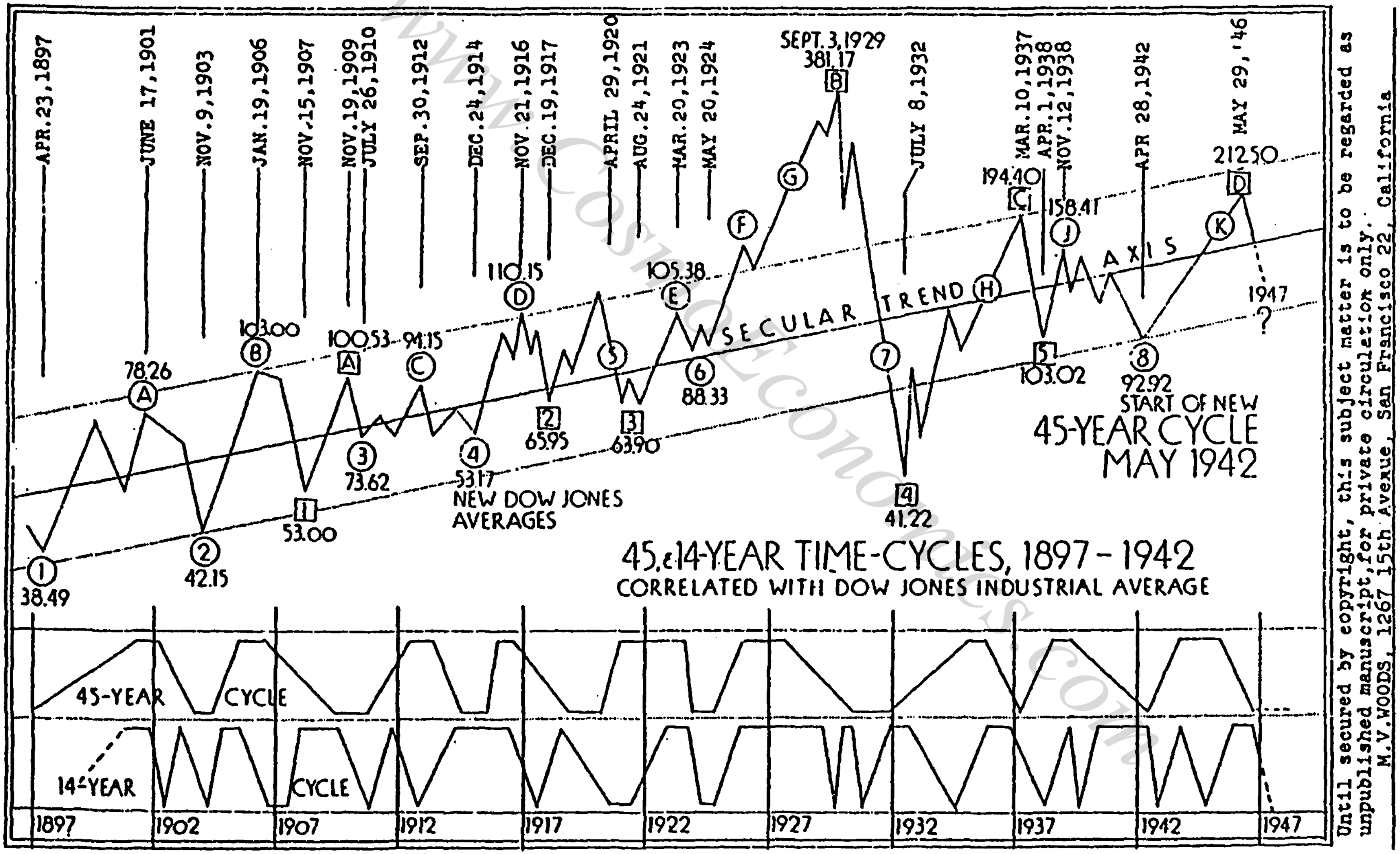
Prices have correlated closely with cyclical impulses for the first four years of the 1942-1988 TIME-CYCLE. The bull trend from 8 , to D ,correspond to the advancing impulse of the 45-year cycle, supported by three rising impulses in the 14-year cycle. A summary of the accuracy of my Long-Term Projection forecasts, based on the 45-year cycle is shown in the following excerpts from past records:

1...The report of Febru ary 1942 stated that "the current (1942) decline will make a low sometime in the spring or summer of 1942. This low should be followed by a bull move into 1943". AFTER MAKING A BEAR MARKET LOW AT 92.92 ON APRIL 28, THE INDUSTRIAL AVERAGE ADVANCED TO 145.30 BY JULY 13,1943, FOR A TOTAL GAIN OF 52.38 POINTS.

2...In the January 1944 report, Long-term Projections forecasted that "the market will complete its present secondary reaction early in 1944. The primary bull trend should then be resumed and carry through until near the end of the year. 1945 promises even bigger markets". FROM A LOW OF 134 22 ON FEBRURARY 7,1944, THE INDUSTRIAL AVERAGE ADVANCED TO 155.85 BY DECEMBER 11,FOR A GAIN OF 21.63 POINTS.

3...The January 1945 Long-term Projection forecast stated that "when the current advance runs its course a mixed and reactionary tendency should prevail in the Average the first quarter of 1945, to be followed by another advance into new high territory". AFTER MAKING A NEW HIGH FOR THE BULL MARKET ON MAY 29, AT 169.08 THE AVERAGE DECLINED TO 160.91 ON JULY 26, THEN BEGAN AN ADVANCE THAT CARRIED STOCKS UP 34.91 POINTS TO DECEMBER 11.

4.. The 1946 stock market has closely followed the Long-term Projection forecast mailed to subscribers on December 26,1945 It called for a decline of at least secondary importance --- lasting into 1947 --- to start by midyear. THE TOP WAS MADE ON MAY 29, AT 212.50. A PRICE CURVE SIGNAL TO SELL WAS GIVEN ON JULY 10, AT 207.57. SINCE THEN THE MARKET HAS DECLINED 43.36 POINTS TO 164.20.


45 & 14-YEAR TIME-CYCLES, 1897 - 1942
CORRELATED WITH DOW JONES INDUSTRIAL AVERAGE
APR.23,1897
JUNE 17,1901
NOV.9,1903
JAN.19,1906
NOV.15,1907
NOV.19,1909
JULY 26,1910
SEP.30,1912
DEC.24,1914
NOV.21,1916
DEC.19,1917
APRIL 29,1920
AUG.24,1921
MAR.20,1923
MAY 20,1924
SEPT.3,1929
381.17
JULY 8,1932
MAR.10,1937
APR.1,1938
NOV.12,1938
APR 28,1942
MAY 29,'46
38.49
78.26
42.15
103.00
53.00
100.53
94.15
73.62
53.17
NEW DOW JONES AVERAGES
110.15
65.95
63.90
105.38
88.33
SECULAR TREND AXIS
41.22
194.40
158.41
103.02
212.50
92.92
1947
?
START OF NEW 45-YEAR CYCLE MAY 1942
45-YEAR CYCLE
14-YEAR CYCLE
1897
1902
1907
1912
1917
1922
1927
1932
1937
1942
1947
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A new rising impulse to begin in 1947, and all subsequent cyclical fluctuations, should mark the approximate tops and bottoms of major bull and bear trends for the next 40 years.

This TIME-CYCLE ANALYSIS is the first of several similar market studies to be published during 1947. The next report, to be mailed in January, will be the annual Long-term Projection forecast for 1947. In this forecast of the COMING BULL MARKET the major cyclical impulses of the 14 and 45-year TIME-CYCLES, and the impulses of a two year intermediate cycle, will be projected, on a chart, to 1948. In addition to these cyclical analyses several other studies in stock market trading are in preparation, for distribution during the coming year. They are a part of your Price Curve Bulletin service.

M. V. Woods

MVW/c
December 1,1946

PRICE CURVE *Bulletin* & STUDIES IN STOCK MARKET TRADING

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MAJOR TIME-CYCLES

The term "cycle" means an interval or space of time, but it does not necessarily imply that the intervals be of equal length. One stock market cycle may last from three weeks to several months, while the length of another could extend over a period of several years.

Each cycle includes a completed bull and bear trend. The duration, or wave length, of a cycle is measured from the day the lowest price is registered by the preceding bear trend to the day of the lowest price of the next succeeding bear trend.

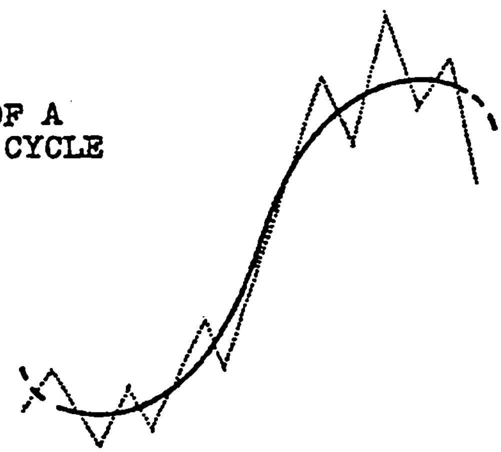
Major stock market cycles, except secular long-term growth trends, correspond to orthordox bull and bear markets -- such as the 5 3/4-year market cycle from July 1932 to April 1938. A major cycle does not progress in a smooth straight or curved line, but is interrupted by secondary cycles of uneven wave lengths which in turn, are broken by wave segments of minor time-cycles. A cycle "segment" is a bull or bear trend. A "cycle" is a bull and bear trend which occurs consecutively.

THE FOUR STAGES OF A COMPLETE STOCK MARKET CYCLE ARE:

1) Period of accumulation, 2) markup, 3) area of distribution, 4) decline. The bull phase of a stock market cycle usually begins with a gradual upward slope, lasting throughout the period of accumulation. During the markup the rate of price change is accelerated and the curve of movement becomes more abrupt until the bull trend has run its course; then it begins to level off in the area of distribution. The pattern of a bull market looks somewhat like an italic S. The irregular seesaw appearance of the trend is caused by intervening minor and secondary cycles superimposed over the major trend.

CHART 3

BULL MARKET PHASE OF A MAJOR STOCK MARKET CYCLE



THE TREND OF THE MAJOR CYCLE (SOLID LINE) LOOKS SOMEWHAT LIKE AN ITALIC ʃ. THE DOTTED LINE SHOWS SECONDARY PRICE FLUCTUATIONS.

Every stock market cycle describes a fixed pattern of "trend" and "counter-trend" within a larger cycle. This pattern recurs continually with interruptions, and is always present in our national economy. If this were not true the world would move along on an even keel without wars, pestilence or famine.

While it has been proven that price fluctuations correlate closely to fixed and variable time-cycles, it has never been demonstrated that cycles cause price movements. It still remains for science to discover the cause of relationship between them. But in the meantime it will be necessary to make the best use of the knowledge available.

Many traders and investors scoff at the idea that business and prices move in cycles beyond the immediate control of man, because they can not lay a finger on the motivating cause. To them a result must have a cause, and unless they can demonstrate the real reason for a price change they will manufacture one from bits of ticker news via processes of illogical reasoning. Even though the premise from which they derive their conclusion may be fallacious, their ego is satisfied.

During the first seven months of 1946 one could find any number of logical reasons why stock prices could not go down and why the Dow-Jones Industrial Average index would not stop this side of "Traders Paradise". The wreckage left from this kind of reasoning is now past history and many experts are now explaining the cause which they should have detected months ago and reported to their clients. To locate or place the cause of a major price change long after it has occurred may be of academic interest, but it certainly does not pay dividends.

Those who persist in taking a belligerent attitude toward cyclical correlation may find themselves victims of the predictions of hucksters and hindsight prognosticators. Many people took a bad beating in 1929, 1937, and again in 1946, and will be ripe for another shearing when the next bull market reaches top. Do not be placated by the thought that you are a long-term investor. After nearly 20 years many of those that bought in 1929 are still holding the bag and losing the opportunities of a lifetime. There is no such thing as a safe long-term investment in common stocks unless one expects to live indefinitely.

FIFTY YEARS OF STOCK MARKET CYCLES

From 1896 to 1947 there were 13 major cycles, consisting of 13 bull markets and 13 bear markets, as defined by the Dow Theory and as measured by the Dow-Jones Industrial Average index. They were as follows:

1) BULL MARKET from August 10,1896 to April 3,1899, lasting 966 days and advancing in 4 waves of buying from 29.64 to 76.04. Gain 46.40 points or 156%.

2) BEAR MARKET from April 3,1899 to June 23,1900,lasting 446 days and declining in 4 waves of selling from 76.04 to 53.68. Loss 22.36 points or 29.4%.

3) BULL MARKET from June 23,1900 to June 17,1901, lasting 359 days and advancing in 2 waves of buying from 53.68 to 78.26. Gain 24.58 points or 45.8%.

Hamilton considered this Bull Market ran to September 19,1902 because that was the high point for the Rail Average. On this basis the market advanced on 3 waves of buying, but on the third wave the Industrial Average fell far short of their previous high, reaching only 67.77. This is the only time this action ever occurred.

4) BEAR MARKET from June 17,1901 to November 9,1903, lasting 449 days and declining in 4 waves of selling from 78.26 to 42.15. Loss 36.11 points or 46.1%.

5) BULL MARKET from November 9,1903 to January 19,1906, lasting 802 days and advancing in 4 waves of buying from 42.15 to 103.00. Gain 60.85 points or 144.3%.

6) BEAR MARKET from January 19,1906 to November 15,1907, lasting 665 days and declining in 4 waves of selling from 103.00 to 53.00. Loss 50 points or 48.5%.

7) BULL MARKET from November 15,1907 to November 19,1909, lasting 735 days and advancing in 5 waves of buying from 53.00 to 100.53. Gain 47.53 points or 89.7%.

8) BEAR MARKET from November 19,1909 to July 26, 1910, lasting 249 days and declining in 2 waves of selling from 100.53 to 73.62. Loss 26.91 points or 26.8%.

9) BULL MARKET from July 26,1910 to September 30,1912, lasting 797 days and advancing in 5 waves of buying from 73.62 to 94.15. Gain 20.53 points or 27.9%.

10) BEAR MARKET from September 30,1912 t0 December 24,1914, lasting 815 days and declining in 4 waves of selling from 94.15 to 53.17. Loss 40.98 points or 43.5%.

11) BULL MARKET from December 24,1914 to November 21,1916, lasting 698 days and advancing in 4 waves of buying from 53.17 to 110.15. Gain 56.98 points or 1o7.2%.

12) BEAR MARKET from November 21,1916 to December 19,1917, lasting 393 days and declining in 3 waves of selling from 110.15 to 65.95. Loss 44.20 points or 40.1%.

13) BULL MARKET from December 19,1917 to November 3,1919, lasting 684 days and advanced in 5 waves of buying from 65.95 to 119.62. Gain 53.67 points or 81.4%.

14) BEAR MARKET from November 3,1919 to August 24,1921, lasting 660 days and declining in 6 waves of selling from 119.62 to 63.90. Loss 55.72 points or 46.6%.

15) BULL MARKET from August 24,1921 to October 14,1922, lasting 416 days and advancing in 3 waves of buying from 63.90 to 103.43. Gain 39.53 points or 61.9%.

16) BEAR MARKET from October 14, 1922 to July 31,1923, lasting 290 days and declining in 2 waves of selling from 103.43 to 86.91. Loss 16.52 points or 16%.

17) BULL MARKET from July 31,1923 to September 3,1929, lasting 2,226 days and advancing in 11 waves of buying from 86.91 to 381.17. Gain 294.26 points or 338.6%.

18) BEAR MARKET from September 3,1929 to July 8,1932, lasting 1,039 days and declining in 8 waves of selling from 381.17 to 41.22. Loss 339.95 points or 89.2%

19) BULL MARKET from July8,1932 to March 10,1937, lasting 1,706 days and advancing in 4 waves of buying from 41.22 to 194.40. Gain 153.18 points or 371.6%.

20) BEAR MARKET from March 10,1937 to March 31,1938, lasting 381 days and declining in 3 waves of selling from 194.40 to 98.95. Loss 95.45 points or 49%.

21) BULL MARKET from March 31,1938 to November 12,1938, lasting 226 days and advancing in 3 waves of buying from 98.95 to 158.41. Gain 59.46 points or 60.9%.

22) BEAR MARKET from November 12, 1938 to April 8, 1939, lasting 147 days and declining in 2 waves of selling from 158.41 to 121.44. Loss 36.97 points or 23.33%.

23) BULL MARKET from April 8, 1939 to September 12, 1939, lasting 157 days and advancing in 3 waves of buying from 121.44 to 155.92. Gain 34.48 points or 28.3%

24) BEAR MARKET from September 12,1939 to April 28,1942, lasting 959 days and declining in 3 waves of selling from 155.92 to 92.92. Loss 63.00 points or 40%.

25) BULL MARKET from April 28,1942 to May 29,1946, lasting 1,492 days and advancing in 5 waves of buying from 92.92 to 212.50. Gain 119.58 points or 128.7%.

26) BEAR MARKET began May 29,1946.

SUMMARY FROM 1896 to 1947

The shortest bull market lasted 156 days; the longest 2,226 days. The average length, 866 days.

The shortest bear market lasted 147 days; the longest 1,029 days. The average length, 538 days.

If the abnormal major cycle from 1923 to 1932 is eliminated the average bull market lasted 753 days and the average bear market lasted 493 days.