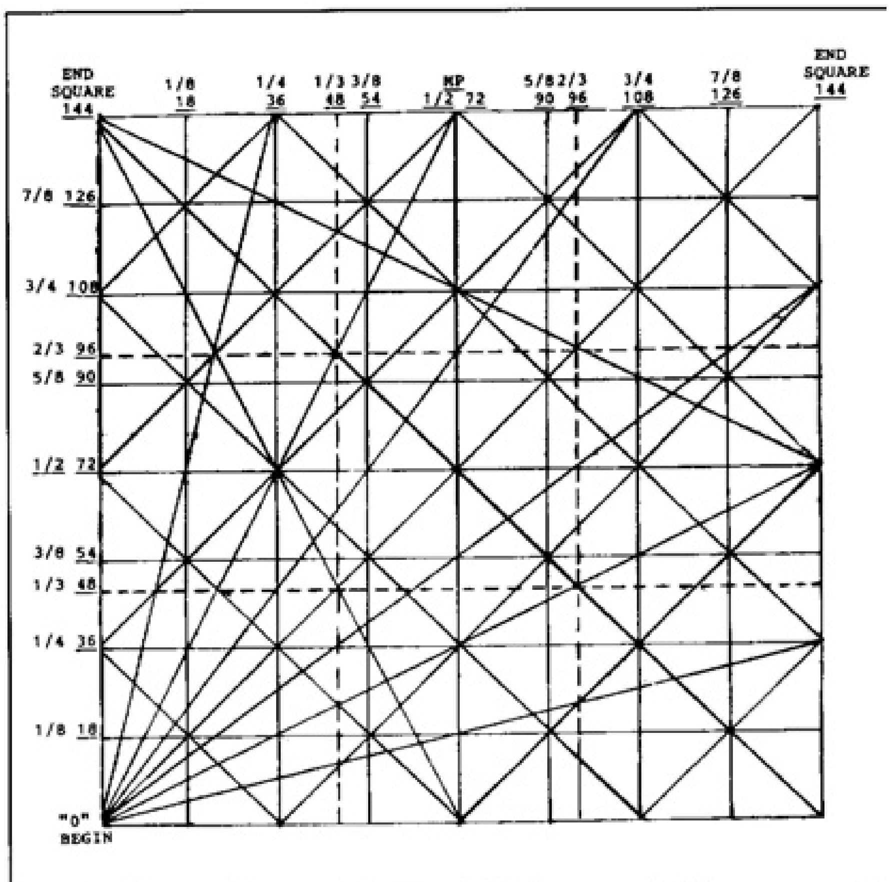
TBonds and Gann ‘s Square of 144

By Phyllis Kahn

In today’s world of high tech hype and costly market systems, the difference between theory and the real market frequently spans a deep gulf of curve-fitting that fails miserably in current and future time. But a mathematical tool developed more than a half a century ago by the master trader W. D. Gann, is still performing in the 1980’s markets exactly as he described that is should.

Very early in his career, W. D. Gann perceptively observed a GEOMETRIC relationship between price and time that has been largely ignored both by the old market masters and the new alike, who focus solely on price. When time is a consideration, generally it’s perceived as a sine wave, a cycle apart from price.

Gann’s unique solution was to create clear overlays that were divided into various Price and Time periods such as 360, 90, or 144, and then placed on significant highs and lows on monthly, weekly, and daily bar charts. He used these fixed, geometric figures which he called “MASTER PRICE & TIME CALCULATORS” to measure market strength, weakness and most important of all, the geometric PROPORTION of price movement to TIME. With study, the Calculator can be used effectively on yearly, monthly, weekly, daily and even intraday bar charts. During the depression Mr. Gann charged $5000 for a weekend course of instruction on its use. Today, with a program called GANNTRADER I this powerful tool is available to anyone with a personal computer.

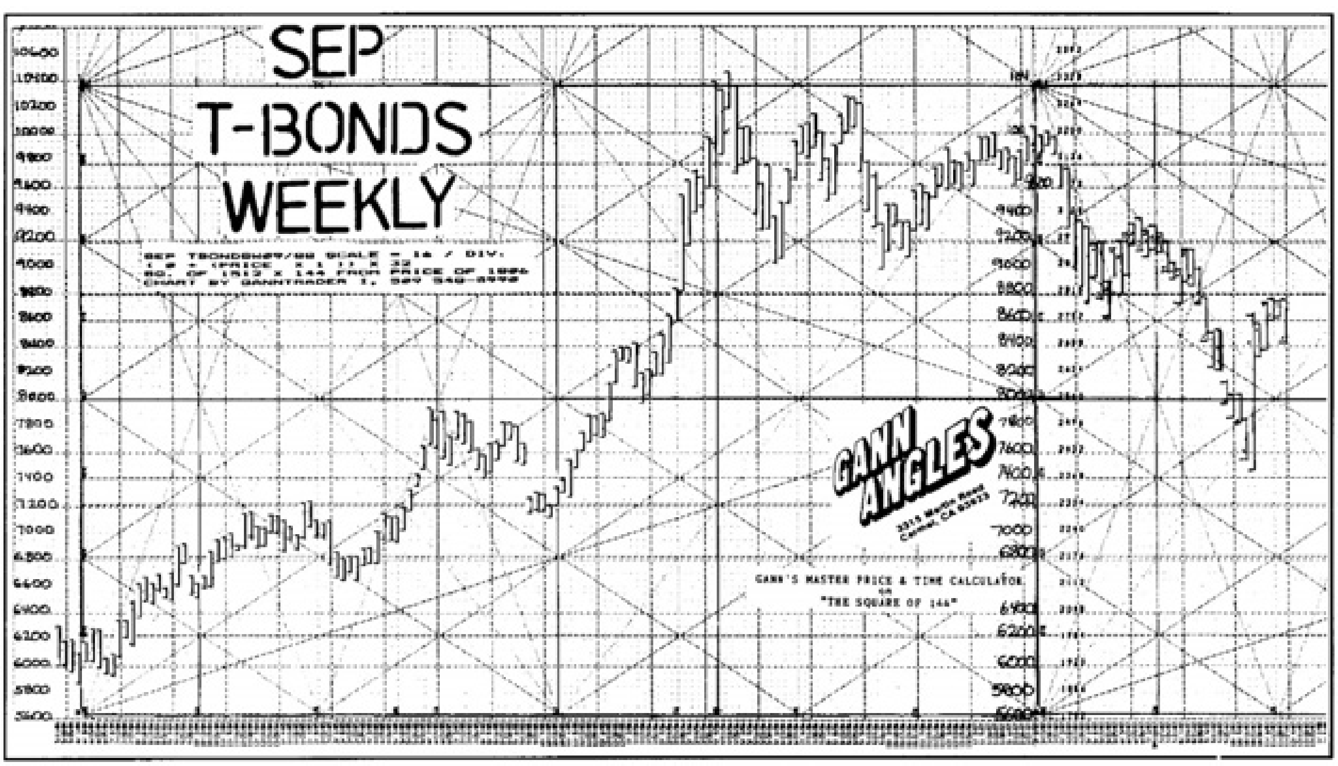


Master Price & Time Calculator - Square of 144

An overview of the schematic of the MASTER PRICE & TIME CALCULATOR shows that the horizontal axis is TIME, the vertical axis, PRICE. The 'square" (actually a rectangle is divided into eights and thirds in both dimensions. Through years of observation Gann concluded that when prices reached the END of the Square in Time (price & time equal), not only did a change of trend occur but it was frequently accompanied by very strong momentum in the NEW (and opposite) direction. He also observed a change of trend at 1/2 in price and time of the Midpoint, what he called the "Grand Center" of the square. He ranked the divisions of price and time in importance:

1. The "End" of the Square the most important; when price and time expire.
2. The Midpoint, 1/2 or Grand Center of the Square. If the Square begins at a low, a 2nd higher low often occurs at the Midpoint, 1/2 or Grand Center of the Square. If the Square begins at a low, a 2nd higher low often occurs at the Midpoint or "Grand Center" where all the angles and price divisions converge. If the Square begins at a high, a 2nd lower high often occurs at the midpoint.
3. The next divisions in importance for a change of trend are 1/3 and 2/3. These two divisions in price and time often "balance" each other.
4. Then 1/4, and finally 1/8. All of the above statements are equally true for PRICE OR TIME. Contrary to common sense, which tells us that markets of today are totally different from those of 20, 40, or 60 years ago, current examples of an idealized Gann 'Square" working out exactly in real time are not at all unusual. An illustration of one such perfect fit" in the veryreal world of Interest Rates occurred as recently as March 1987 in the most heavily traded of all future contractsTBONDS. The computer generated chart is a Square of 144, "overlaid" on a Weekly September TBond chart, Gann style i.e. Sep contracts only, in yearly continuation.

The Square of 144 begins at the bottom of the chart at the last major low in TBonds in June 1984. Just like the schematic, the computer-drawn overlay in divided into eights and thirds vertically and horizontally. Notice that on the 1st 1/8 in Time at 10/5/84, prices had a one week



pullback that corresponded exactly with that time division. After the low, prices again moved higher stopping exactly (again) at the 1/3 price division at 72 one week before the 1/4 time division was due. At 3/8 in time on the Square, prices almost, but not quite made it up to the 1/2 or Midpoint in price at 80. From there, prices retreated and corrected until one week before the Midpoint or 1/2 in Time was due (10/18/85), another higher low was made. Here is a market on a weekly basis that conformed to Gann's description: in a rising market a change of trend should occur at the "Grand Center" or Midpoint in the Square. At 71 weeks from the low, one week before the Midpoint in Time, the 7 week downward correction ended and prices continued their strong bull market behavior.

The advance accelerated after the Midpoint low, running prices all the way up to the Top of the Square (strong price resistance) in April 1986 just when the 2/3 Time division was due. That top was also confirmed by another Gann method. The price high at 104 on 4/17/86 was 104 months from the all time high in 1977, making it a Gann "squaring of price & time" on the Sep TBond MONTHLY chart. Although this suggested that a major change of trend could occur in TBonds (from up to down), there was still 48 WEEKS remaining in the Square of 144, the End of Square not due until the week ending 3/6/87.

But it's easy to see that after that important monthly and weekly high was made in April 86, the advance which had been in progress for 96 weeks (2/3 in sq. of 144) stopped making new highs and became extremely volatile. It had a major drop from 1-4 to 9116, then back to a lower high at 102 in Aug 86, then down again to a lower low at 90 in Sep. 86. As the advance faltered, there were several caution flags during January and February 87. Weekly price ranges began shrinking despite sharp advances in the stock market and of course, the Square of 144 was running out of time. (It had run out of Price at the top of the square in Apr. 86.) The finale of this almost 3 year market saga was staged on March 5, 87 when the Tbonds proved once again the genius of Mr. Gann's methods by making a 3rd lower top EXACTLY AT THE END OF THE WEEKLY SQUARE OF 144.

The trader in possession of this information was able to anticipate, almost a year in advance, the proper time to short into the top with great confidence as this most heavily traded of all futures conformed to the Square for almost three years. Imagine what this could have meant to the several brokerage houses that lost hundreds of millions of dollars in the momentum declines that followed the "End of the Square." In March 87, many leading interest rate analysts were "forecasting" prices to 108 or even 110 yet anyone who had this Square knew almost a year earlier that a major trend change was indicted and that patience to wait it out would be well rewarded.

But the value of the Square doesn't end with the top. The new square is a road map of FUTURE price and time. TBonds have entered the third Square of 144 since the 1981 low. Since trend during the first two squares was decidedly up and bullish, Gann principals suggest that the main trend during this square will be down and bearish. Judging from the 1st decline in April/May 87 that hit the 5/8 price division 8600 by making a low at 8603, followed by the next leg down that met the 3/8 division at 7400, it's clear that the accuracy of the previous two Squares can be relied upon to continue. As the major price Top was made at 2/3 in Time in the 2nd Square, Gann's Principals of balance implies that 1/3 into this new Square (2/5/88) should be a major low.

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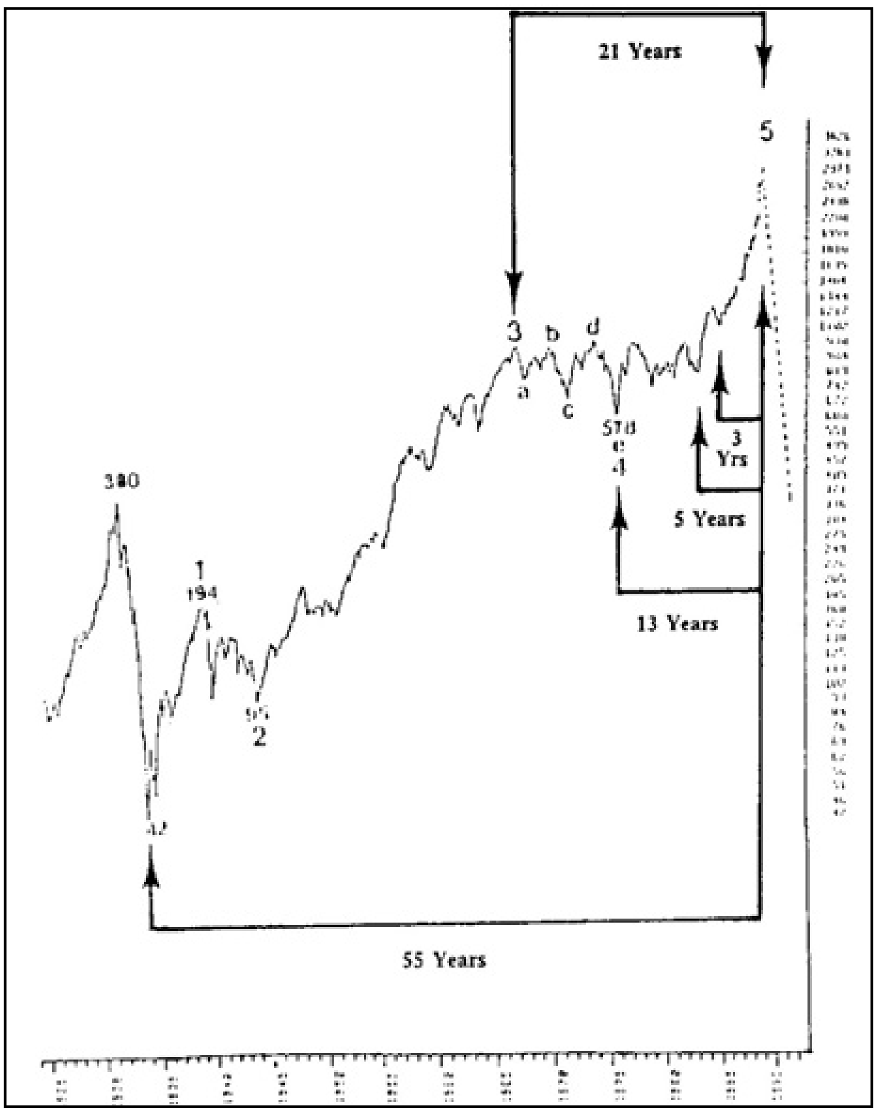
Classical Market Theory

By Frank Taucher

The 1987 (stock market) change-in-trend projection given by yearly Fibonacci Time Cycle Counts is as classic as we will probably experience in our lifetime in any market. 1987 IS THE 55TH YEAR FROM MAJOR LOWS MADE IN MANY MARKETS IN 1932 AT THE DEPTHS OF THE GREAT DEPRESSION.

As the Elliott Wave Theory states that the current major long term expansion is in the 5th and final wave of a 5 wave move that began off the 1932 lows (the third wave peaking in 1966 and the 4th wave bottoming (arguably) with the 1974 recession lows), the 1987 change-in-trend projection given by yearly Fibonacci Time Cycle Counts is as classic as we will probably experience in our lifetime in any market. 1987 is the 55 year off the beginning of the entire move, the 21St year off the peak of the third wave, and the 13th year off the low of the 4th wave. 34 years from the 1932 low marked the wave 3 top in 1966. 8 years later, in 1974,



the wave 4 low was made. 8 years after that, the 1982 major low was made. The entire 5 year bull market from 1982 to 1987 was equal in time to wave 1 of the bull market which lasted from 1932 to 1937.

Additionally, for you Gannophiles, I would point out that 1987 was 90 years from the 1897 April 19th and April 23rd lows at 38.49!

A peaking in 1987 would fit nicely with the Kondratieff Wave and would imply that the forth coming period will be one of severe economic slowdown. In fact, this theory is so bearish that thue believers should consider have about 6-12 months future expenses of readily available cash on hand. Supporting this outlook in the late 1987 were the slowest M2 money supply growth that HIS country had experienced in 17 years, the out-of-control twin towers (and we don't mean the two Houston Rockers basketball players or the New York skyscrapers, either, but the budget and the trade deficits), the recent downturn in only the leading economic indicators, but also the Columbia University index of leading economic indicators (which tends to lead even the leading economic indicators and turned down spring, 1987), third world indebtedness, banking insolvencies, etc. In fairness, however, we do point out that the above is not the only scenario. Other viewpoints are discussed in other sections of the Almanac.

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Gold Trading

By James E. Schildgen

Professional speculation has three main components for every trade - to enter, hold and exit. The most challenging part of any market is projecting important highs and lows before they happen. This has also been referred to as goal or objective trading. Two of the most famous methods of price projection in use today were developed and advanced by W. D. Gann and R. N. Elliott. In following, Gann's Cardinal Square and Elliott's use of Fibonacci Progressions rather than just give a recommendation without explanation. These are just two of the many systems developed and used by Gann and Elliott. Further Gann and Elliott approaches are presented in my book, Analytical Methods for Successful Speculation.

R. N. Elliott was a bookkeeper who has a fascination for mathematical price series. He constantly developed different number progressions, high-low price cycles, but most of all, price cycle contraction and expansion series. His most famous progression series is the Fibonacci

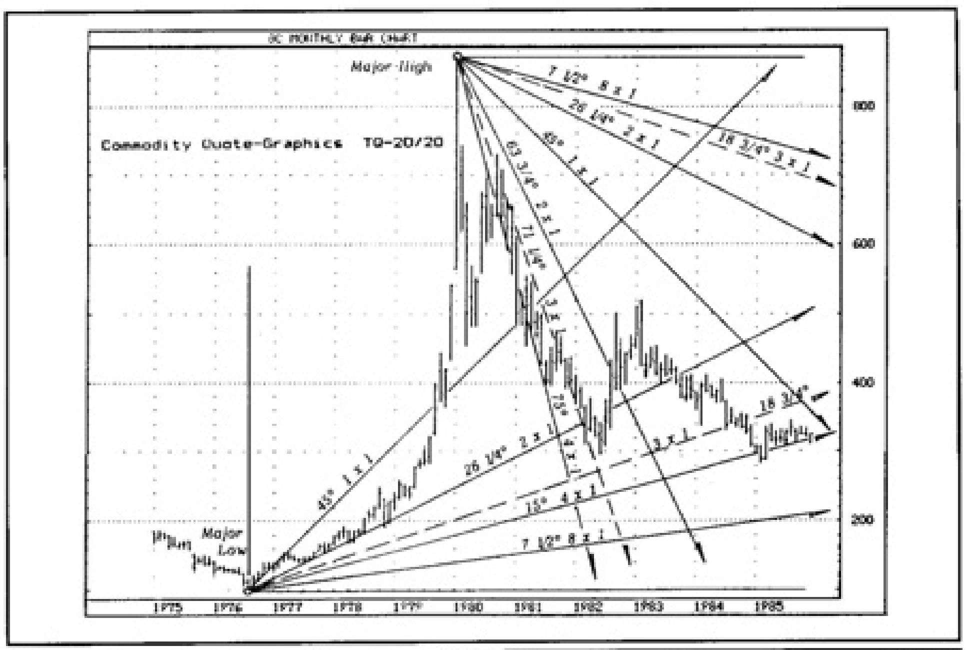


Chart B

C = $35.00/troy ounce

C x 2 =	$70.00	1972's August High - $69.00
C x 3 =	$105.00	1973's Intermediate High - $125.00
		1973's Intermediate Low - $90.00
		1976's Major Low - $99.00
C x 5 =	$175.00	1978's Intermediate Low - $183.00
		1974's Orthodox High - $180.00
C x 8 =	$280.00	1975's Major Low - $282.00
		1982's Major Low - $296.00
C x 13=	$455.00	1980's Panic Selloff Low - $453.00
		1982's Intermediate Low - $452.00
C x 21 =	$735.00	1980's Orthodox High - $732.00

Chart D

Cardinal Square - Fixed Axis (Assumed Base)	Major Price	High/Low Fixed Price
20	$20.67	Fixed Price
40	42.22	1970-Fixed
	45.00	1969-High
60	69.00	1972-High
100	99.70	1976-Low
	127.00	1973-High
	129.00	1974-High
200	199.50	1974-High
260	249.40	1978-High
340	345.80	1985-High
	453.00	1980-Low
420	397.00	1981-Low
520	515.00	1983-High
620		Missed
740	729.00	1980-High
860	873.00	1980-High

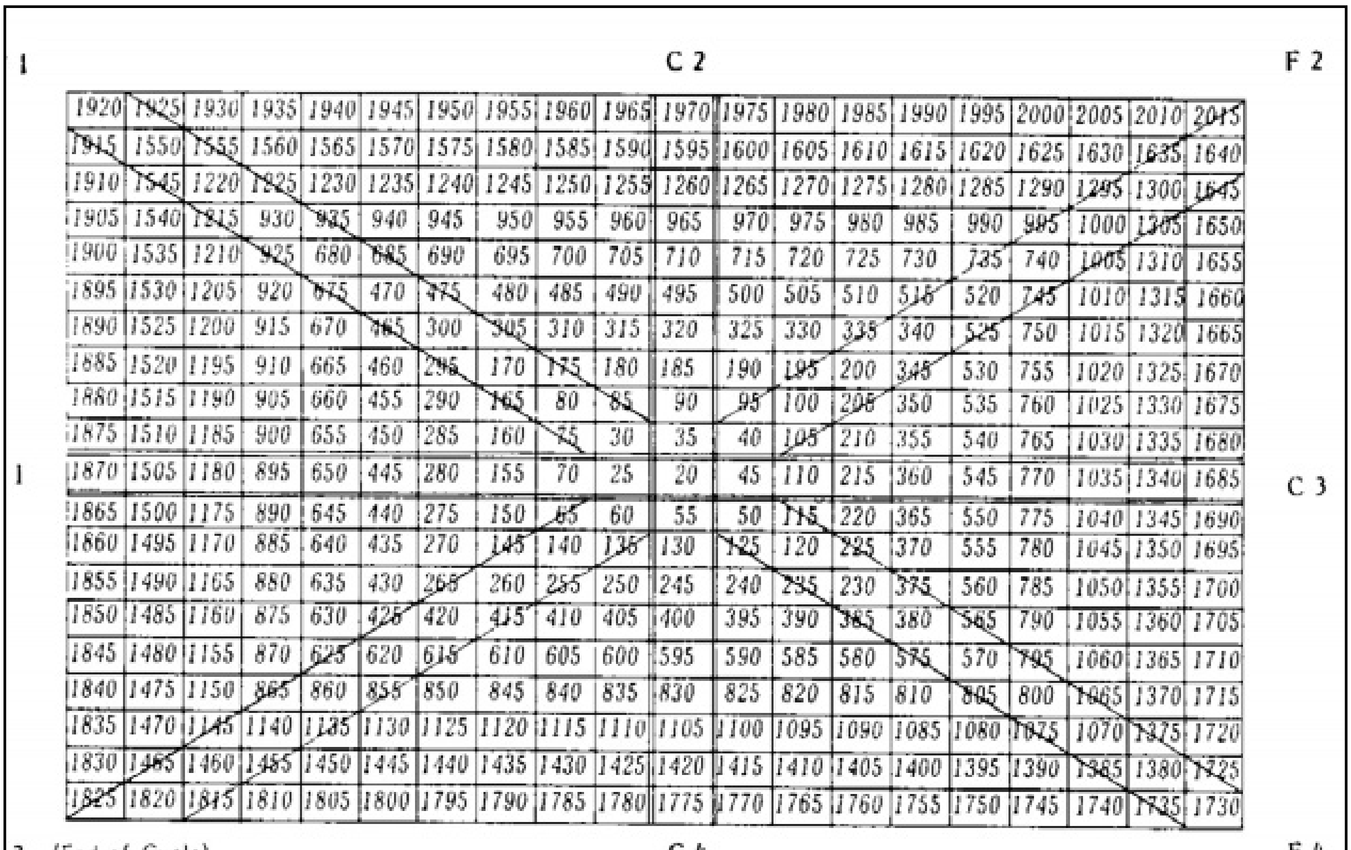
Progression, named after the Italian, Leonardo of Pisa (Leonardus Pisanus (Latin) or simply Fibonacci). First published in 1202 A.D. as the Liber Abaci and later in 1220 A.D. in Practica Geometria, Fibonacci showed this mathematical progression using an involute process. (I.e. 1+1 = 2; 2+2 = 3; 2+3 = 5; 3±5 = 8; etc.) Using any number in the series as a multiplier or divisor, a ratio evolves of 1.618 or 0.6 18 or its inverse 0.382. This ratio is observable in numerous natural phenomena; the branching of trees, sea shells, spirals (i.e. the nautilus) sunflower seed growth, the human inner ear, etc.

For any market a significant primary high or low price must best used. Due to gold's previously controlled prices of $19.39 for 45 years, $20.67 for 97 years and finally $35.00 before deregulated in 1971, gold gives a good example of a significant low to work with.

When Fibonacci Progression is applied to gold using the $35.00 low, we have2x$35=$70; 3 x $35.00=$105; 5 X $35 = $175; 8 x $35 = $280; etc. An analysis of these prices is demonstrated in the copy of "Chart B, Fibonacci Price

Analysis", page 145 from Analytical Methods for Successful Speculation. Fibonacci Price Progression shows future meaningful highs will probably be $1,190.00 (34 x $35); $1,925 (55 x $35); or $3,115 (89 x $35). When or how these prices may be achieved requires an in-depth study of current financial data and their correlation to gold's price fluctuations.

The most famous and least understood market mathematician was W. D. Gann. Gann passed away in 1955 with a net worth of over $50,000,000 acquired from the markets. More astonishingly he was charging $5,000 (1955 dollars) for his market course, containing most, but probably not all, of his trading methods and secrets. That trading course cost was roughly half the value of a three bedroom home in 1955.



1920	1925	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015
1915	1550	1555	1560	1565	1570	1575	1580	1585	1590	1595	1600	1605	1610	1615	1620	1625	1630	1635	1640
1910	1545	1220	1225	1230	1235	1240	1245	1250	1255	1260	1265	1270	1275	1280	1285	1290	1295	1300	1645
1905	1540	1215	930	935	940	945	950	955	960	965	970	975	980	985	990	995	1000	1305	1650
1900	1535	1210	925	680	685	690	695	700	705	710	715	720	725	730	735	740	1005	1310	1655
1895	1530	1205	920	675	470	475	480	485	490	495	500	505	510	515	520	745	1010	1315	1660
1890	1525	1200	915	670	465	300	305	310	315	320	325	330	335	340	525	750	1015	1320	1665
1885	1520	1195	910	665	460	295	170	175	180	185	190	195	200	345	530	755	1020	1325	1670
1880	1515	1190	905	660	455	290	165	80	85	90	95	100	205	350	535	760	1025	1330	1675
1875	1510	1185	900	655	450	285	160	75	30	35	40	105	210	355	540	765	1030	1335	1680
1870	1505	1180	895	650	445	280	155	70	25	20	45	110	215	360	545	770	1035	1340	1685
1865	1500	1175	890	645	440	275	150	65	60	55	50	115	220	365	550	775	1040	1345	1690
1860	1495	1170	885	640	435	270	145	140	135	130	125	120	225	370	555	780	1045	1350	1695
1855	1490	1165	880	635	430	265	260	255	250	245	240	235	230	375	560	785	1050	1355	1700
1850	1485	1160	875	630	425	420	415	410	405	400	395	390	385	380	565	790	1055	1360	1705
1845	1480	1155	870	625	620	615	610	605	600	595	590	585	580	575	570	795	1060	1365	1710
1840	1475	1150	865	860	855	850	845	840	835	830	825	820	815	810	805	800	1065	1370	1715
1835	1470	1145	1140	1135	1130	1125	1120	1115	1110	1105	1100	1095	1090	1085	1080	1075	1070	1375	1720
1830	1465	1460	1455	1450	1445	1440	1435	1430	1425	1420	1415	1410	1405	1400	1395	1390	1385	1380	1725
1825	1820	1815	1810	1805	1800	1795	1790	1785	1780	1775	1770	1765	1760	1755	1750	1745	1740	1735	1730

Chart C

Prior to gold's price being pegged at $35.00, it was first pegged at $19.39 and then $20.67, as mentioned above. Using a base price of $20.00 (which is a mean of $19.39 and $20.67) and by increasing increments of $5.00 Gann's Cardinal Square displays and apparently meaningful series as shown in "Chart C, W. D. Gann Cardinal Square Chart." To test which of the four axis worked best, a comparison grid is shown in "Chart D, W. D. Gann Cardinal Square Prices". Actual price highs and lows are shown to the cardinal square axis F2-F3 numbers.

Due to the many variances, it would appear that Gann's Cardinal Square is not as accurate in predicting significant highs and lows as Fibonacci Progression. I feel Gann's systems were more applicable in his lifetime due to the prominence of grains. There were virtually no precious metal, financial, or stock index futures with which to do price series analysis at that time.

Perhaps if gold's price has never been regulated by the U.S. Government, Gann's Cardinal Square and Fibonacci Progression may have been more accurate in future price predictions. However, since many invariable needs to regulate his environment, natural time/price sequences don't always work as well. Just look at the October 1987 stock market. Then again, Kondratieff's 52 year cycle of economic contraction may have begun in that market.

The most challenging part of speculation is exiting profitably at a predetermined major price objective. By hindsight, both methods presented some viability in these examples.

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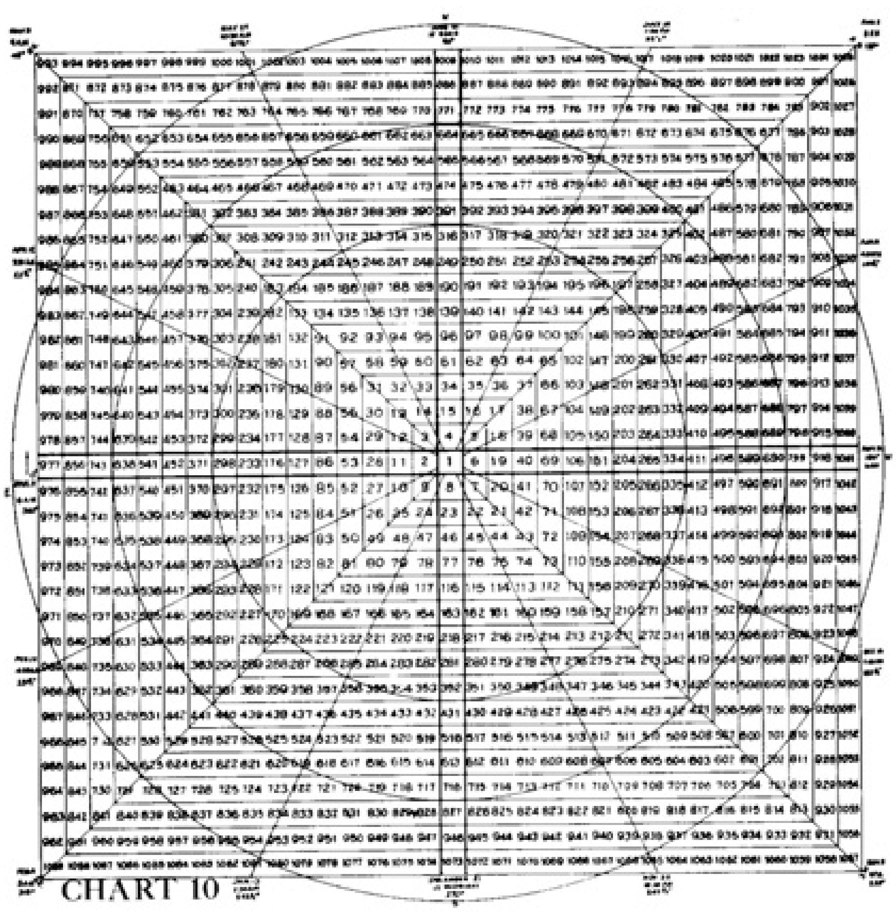
Predicting Market Trends Using the Square of 9

By Chris Kakasuleff

The square of nine popularized by W. D. Gann is very reliable in determining market trends. It is a useful market tool in almost all markets including stock indexes, stocks, commodities, and options. The numbers in the square of nine can be used as price levels of support and resistance, and most importantly as time units. These numbers can be used to count minutes, hours, market days, calendar days, weeks, months, and years.

First let's understand how the square of nine is constructed. In our illustration you see a spiral of numbers starting with one in the center, and then a commencement of numbers in a clockwise spiral that can go into infinity. In a clockwise spiral that can go into infinity. In addition overlaid on these numbers is a 360 degree circle. This circle is divided by 8. but can he divided by 16, 32, etc. When the circle is divided by 8. you have eight 45 degree angles. These angles are 0-45-90-135-I 80-225-270-315 degrees. Numbers from 2-1 1-26. etc. are on the 0 degree



Square of 9

angle. Numbers from 3-13-31. etc. are on the 45 degree angle. Numbers 4-15-34. etc are on the 90 degree angle. Please study which numbers correspond to the balance of each 45 degree angle on the 360 degree circle.

Now that you have a fair understanding of the construction of the square of nine, lets utilize its magical powers and turn its numbers into calendar days. To begin we must decide where we're going to count calendar days from. For best results, it is important to count the days from major market bottoms, or you may count the days from the birth or commencement of trading on any stock or stock index. In the stock market you could count the days from the first or commencement of trading on any stock or stock index. In the stock market you could count the days from the birth of the New York Stock Exchange on May 17th. 1972. Using this date could be tedious, hut rewarding. Another important date would be the all time modern low of the Dow Jones Industrials Average on July 8, 1932. You could experiment with the Dow low on December 6, 1974.

Probably the most useful low to count calendar days from, is the most recent major bear market low on August 12, 1982. Therefore in our example on how to utilize the square of nine, we are going to count calendar days from August 12, 1982.

First some rules and guide lines are in order here. Rule one is when the market has reached a high or low on a particular angle, then expect another high or low on the same angle in the next cycle. The next cycle is a continuation of the spiral of numbers around the circle, until they reach the same angle. As you can see in our illustration of the square of nine, the numbers 9, 25, 49, 81, etc all are at the end of each spiral therefore ending each cycle. An example would be if the market made a low on the 28th day in cycle 3 on the 0 degree angle of the square of nine, you would look for another low at 53 days on the 0 degree angle in cycle 4.

Another rule to follow is that market action or trends in the current cycle between the angles will generally follow the market trends that occurred in the prior cycle, between the same angles. If you have a low in the market on the 28th day in cycle 3 on the 0 degree angle and a market high on the 40th day on the 180 degree angle also in cycle 3, you can expect similar market action in cycle 4.

Rule three is the fact that at times you will be what I call psychological inversions. You will be expecting a low, as predicted on a particular angle in the last cycle, but instead on the same angle in this cycle you get a high, what you do here is invert or reverse all the highs and lows from the last cycle. If you had a low often 28 days of cycle 3 and a high at 40 days on cycle 3. but on the 0 degree angle of cycle 4 the market makes a high instead of a low then expect the market trend to be reversed. You should now expect a market low on the 180 degree angle in cycle 4, just the reverse of cycle 3 on the 180 degree angle where the market topped out. When the market reverses again, reverse the cycles back to their former pattern. In overcoming this aspect of the square of nine in trading its fairly simple to just watch the trend between the angles. IF the market action is the opposite from what it was doing in the prior cycle, the trend may be reversing.

The first date we'll be calculating is April 10th, 1987 which is 1702 days from August 2, 1982. This date is on the 0 degree angle in cycle 211. To determine what may happen around April 10th, we need to refer back to the 0degree angle of cycle 20. By utilizing a hand calculator you will find that in the last cycle 1541 days is on the 0 degree angle and this corresponds to October 31, 1986. Thus 5 days later the Dow peaked at 1899 on November 5th. Therefore in this cycle we should expect another high on the same either side of 5 days. And sure enough the magic of the square of nine produces results again, as on April 6th, 1987, 4 days before 1702 days on the 0 degree angle, the Dow reached an all time high that held for more than two months.

Lets move ahead to the 45 degree angle in cycle 21. We find the number 1723 which equals May 1st 1987. In the last cycle 1561 days was on the 45 degree angle and the date was November 20th, 1986. Two days earlier the Dow bottomed on November 18th. In this cycle the market reached a low 4 days earlier on April 27, 1987. Another remarkable revelation.

Before we move on to a few more examples, its important to realize that as more and more time passes from a major bean market low, the number of days between each 45 degree angle grows farther apart. Therefore its important after several months from a major low to divide the circle by 16. This gives you 16 angles between calendar days at 22 1/2 degrees apart.

This begins us at the next example. On August 25, 1987 the Dow closed at its all time high at 2722. The number of days that passed from August 12, 1982 was 1839. which is precisely on the 292 1/2 angle. On March 10th 1987 in the last cycle at 1671 days the Dow made a short team top also exactly on the 292 1/2 degree angle.

Of course there were many major factors contributing to the top on August 25th. These areas follows, August 12, 1987 marked 60 months from the low on August 12, 1982. A geometrical angle gaining 32 points per month crossed 2700 in August 1987. Also 52x52 equals 2704 the square of 52. A very important natural number. This all pointed to a major change of trend in price and time. However, I'm getting ahead of myself, as this is information for my readers in future articles.

Did the square of nine predict the great crash on October 19, 1987. We'll as noted on April 27th the Dow reached a low 4 days early on the 45 degree angle. In the next cycle on the 45 degree angle, 1893 days equals October 18, 1987 which fell on a Sunday. The next day the Dow crashed 500 points. Of course we cannot discount the help of another major cycle at that point. As two trading days earlier on October 15th marked the end of 270 weeks, or three quarters of the cycle of 360 weeks from the low on August 12, 1982.

An interesting side line on the square on nine is to realize that all angles on the cardinal squares are in harmony. That would be the 0-90-180-270 angles, and also the fixed squares 45-135-225-3 15 angles are in harmony. Let's see if this idea can produce anything of consequence. Well October 8, 1987 was 743 days from the September 25, 1985 lows. The number 743 is on the 0 degree angle. Also October 5, 1987 was 371 days from the September 29, 1986 low. The number 371 is on the 0 degree angle. October 8th, 1987 was marked 281 days from the December 31, 1986low.Thenumber28l is on the 270 degree angle. And finally October 5, 1987 marked 139 days from the May 19th low. The number 139 is on the 90 degree angle. Between October 15th and October 9th the Dow lost 158 points, the biggest losing streak in history up to that point.

One more example of our system using calendar days produced another bulls eye on November 10, 1987. This date falls one day after 1915 days which is on the 90 degree angle in the prior cycle the Dow closed at a low on May 20, 1987, two days earlier than 1744 days.

This is all hindsight now, isn't it dear reader. Therefore can the square of nine really look into the future to predict tops and bottoms? Let's put the reputation of the square of nine on the line, by predicting a market trend in the Dow after this article has gone to print. As noted earlier on August 25, 1987 the Dow reached an all time high on the 292 1/2 degree at 1939 days. In the next cycle on the 292 1/2 degree we find 2014 days have passed and the calendar date will be March 5, 1988. On this date we will expect the market to reach a high give or take a few days. Don't forget, watch out for psychological inversions. They could be dangerous to your bank account, so March 5. 1988 may turn out to be a low.

In my next article I'm going to write excerpts from an unpublished book that I'm writing about the application of the natural cycles of 45-52-144, and 360, and translating these numbers into days, weeks, and months. This article will teach you the mechanics of the division of time, and the application of the information to stock market prediction.

I'll touch on a pet theory of mine as to how these cycles are actually a time gauge for the manifestation al all events on the planet earth, thus giving us an understanding of the mechanisms of the Kharmic Wheel of Life. W. D. Gann proved the validity of this himself, by predicting in advance, World War II, the participants, when it would start, and when and how it would end, by using these very cycles. Until next time.

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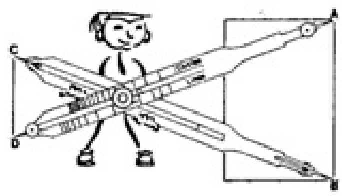
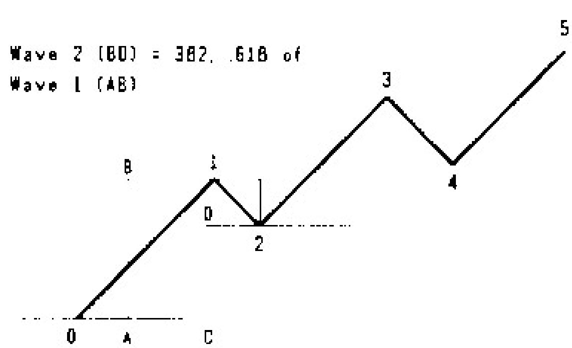
How to Use the Ratio Compass Divider

By Larry Jacobs



The Elliott Wave method of market analysis is an excellent technical analysis method. The basic idea of the Elliott Wave Theory, is that a bull market has five waves up to a top followed by a down turn. Waves 1,3, and 5 are thrust waves and waves 2 and 4 are corrective waves. Two of the thrust waves are the same length. Within each of these wave patterns are smaller wave patterns. The Elliott Wave Theory states that if wave 2 is a simple correction (prices falling without interruption in the down trend), then wave 4 will be a complex correction with a 3 wave A B C movement down to wave 4. Within this pattern, expanding waves usually will increase by the ratios .618, 1.000, 1.618. 2.618, 3.618 or 4.618. Corrections usually correct .382, .500 or .618 of the prior thrust wave. To get started you must first set the compass to the golden ratio. To do this close the compass. Set the cross hair to the golden ratio setting on the right-hand scale. CD = .618 AB. Use this setting to project the contracting or expanding waves objectives.

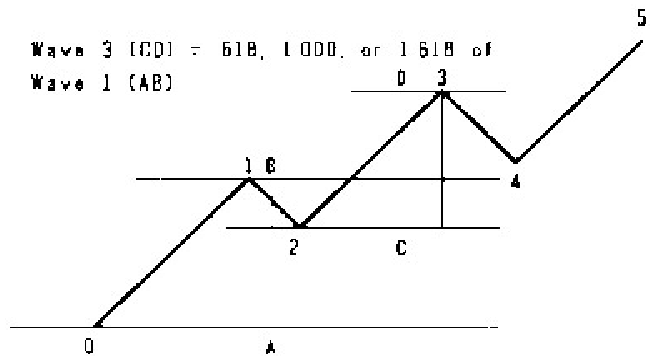
Wave 2



PROCEDURE:. Place the compass point A at 0 and point B at the top of wave 1. Flip the compass. Place point C on 0 base line and mark point D. Point D to the top of wave 1 is the .382 reaction point of wave 1.

THEORY: The corrective wave 2 will usually react .382 of thrust wave one. The next common is .6 18.

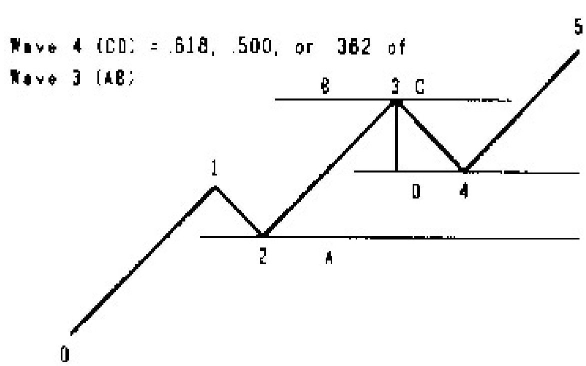
Wave 3



PROCEDURE: Place compass point A on the 0 base line. Place point B at the top of wave 1. Flip the compass. Place point C at the bottom of wave 2 and mark point D. This is the projected top of wave 3.

THEORY: Thrust wave 3 will usually advance .618 of wave I beginning at the bottom of wave 2. The next common advance is 1.000 of wave 1 and the least common is 1.618 of wave 1.

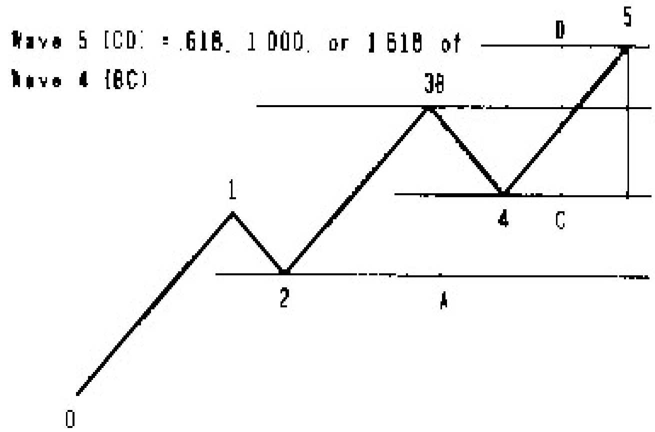
Wave 4



PROCEDURE: Place the compass point A at the bottom of wave 2 and point B at the top of wave 3. Flip the compass. Place the compass point C at the top of wave 3 and mark point D. This is the .618 reaction point for wave 4.

THEORY: The corrective wave 4 is usually .618 of wave 3. the next common retracement is .500 of wave 3 and the least common retracement is .382 of wave 3.

Wave 5



PROCEDURE: Place compass point A at the bottom of wave 2. Place compass point B at the top of wave 3. Flip the compass. Place compass point C at the bottom of wave 4 and mark point D. This is the projected top of wave 5.

THEORY: The thrust wave will usually advance .618 of wave 4. The next common advancement is 1.000 of wave 4 and least common is 1.6 18 of wave 4.

There are many other ratios that can be used to project wave lengths. Some are related to the golden ratios and others are linked to the 1/2 and 1/3 points of the Gann Square. The techniques to be used with these ratios are very interesting and can be highly profitable. In following issues we will go into some of the other ratios and techniques that can be used with them.

W. D. Gann's Within Move

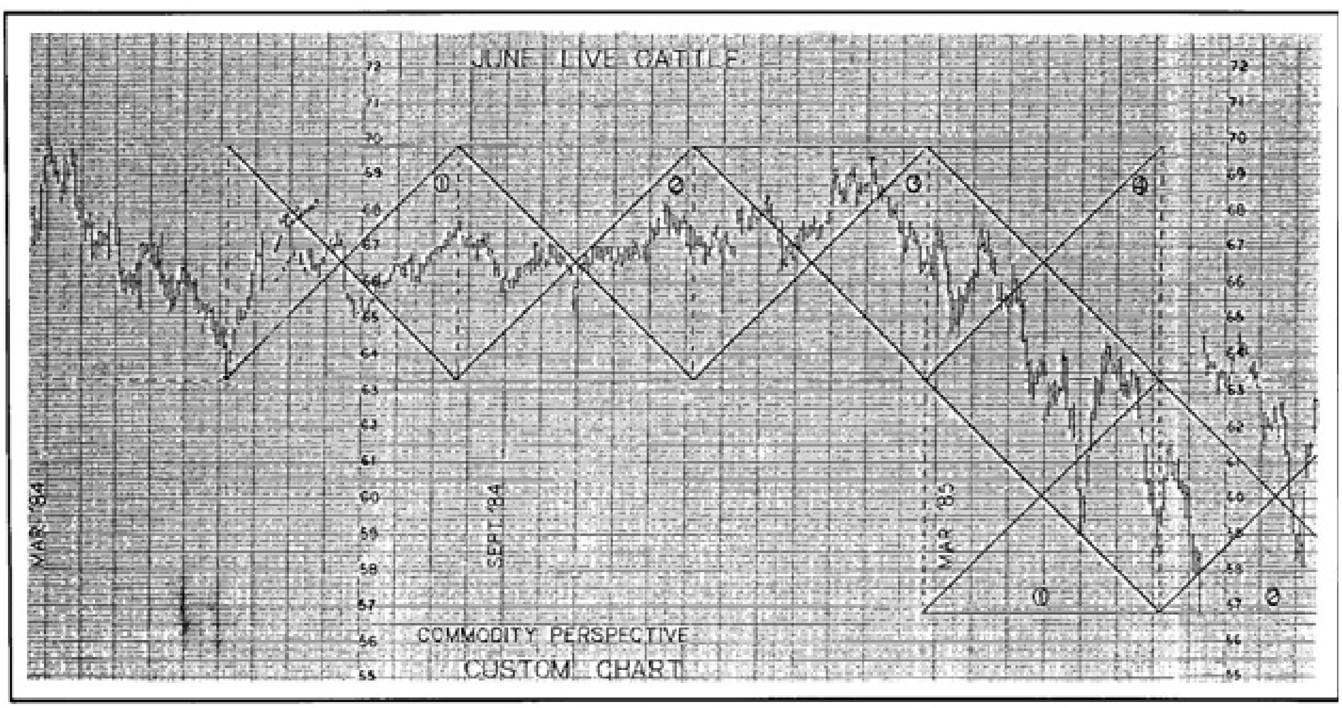
By Joel Rensink

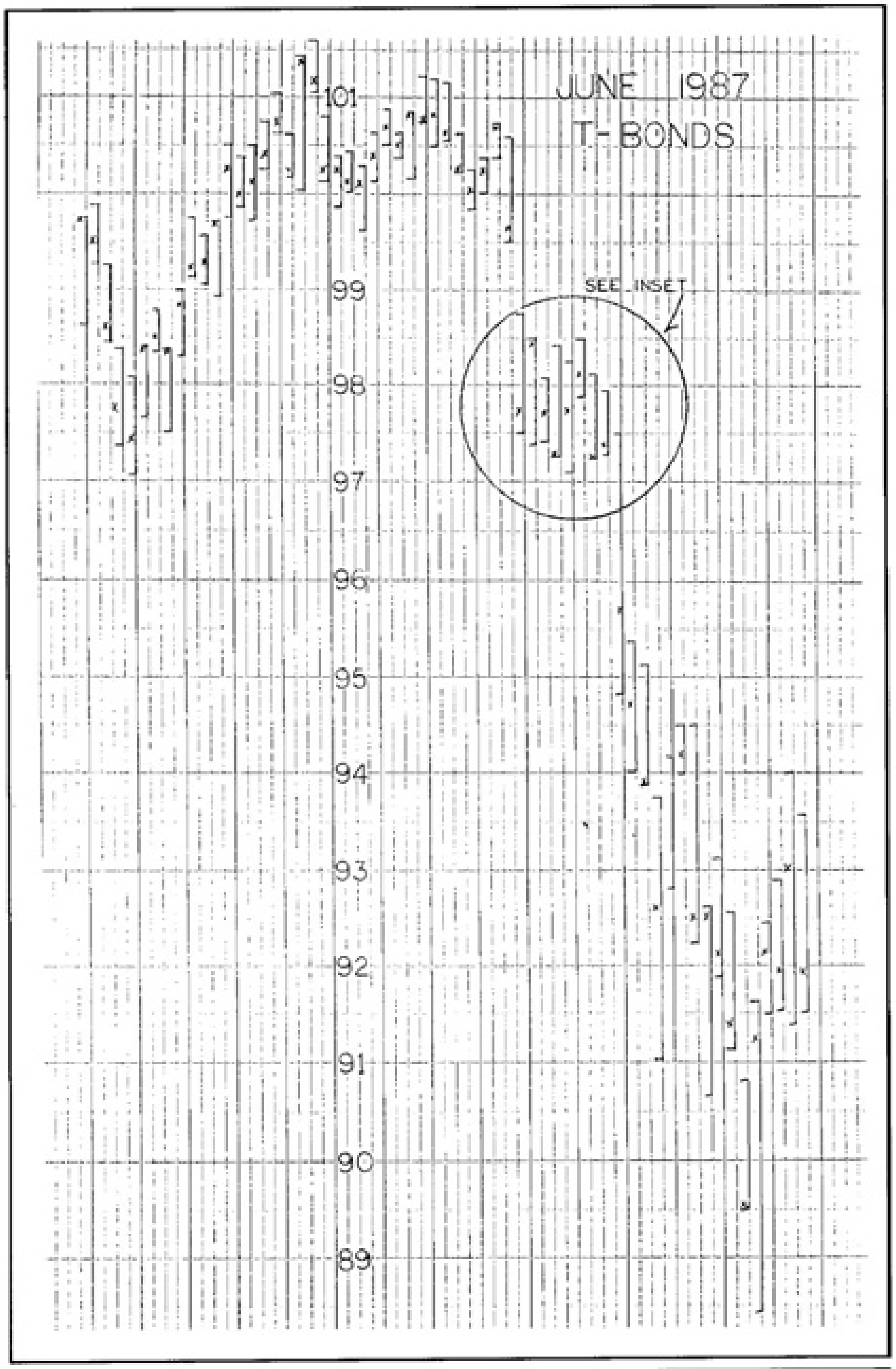
It is gratifying to be asked to write an article for a magazine which is interesting in the reality of trading the futures and stock markets. For the small or large trader alike, validity of what we use to trade is critical.

When people realize that trading the markets takes effort they usually start by studying all they can on market principals. Besides finding the best-known and least-followed advice of "cut your losses short and let your profits run", they read "the trend is your friend", "trade only when you KNOW what the trend is", and "buy on reactions in bull markets, sell reactions in bear markets." These are true enough, but, however well-intended; advice like the above is almost valueless unless it is accompanied with a true definition of trend so you can tell how large your bull or bear market is that you are looking for. Also needed is an indication of the bull or bear market is that you are looking for. Also needed is an indication of the time involved in the forecasted move so you would know if what may only appear at first to be a correction may in fact be a major change in trend.

In my study, only the works of W. D. Gann satisfactorily address these needs. Mr. Gann based his entire methodology on the concept of markets continually repeating themselves, and that they were their own best forecasters. Thus, he let the market filter itself. I want to discuss just one of his less complex buy highly accurate indicators, the within move; or trading range.

It is a rare trader who doesn't have rules on trading ranges. In his premier effort, the book "How to Make Profits in Commodities", Gann talked about the apparent movement of markets being either just up or down as being somewhat incorrect. This is because markets spend a great deal of time just going sideways. He said, "After it gets out of the sideway movement,




JUNE 1987
T-BONDS
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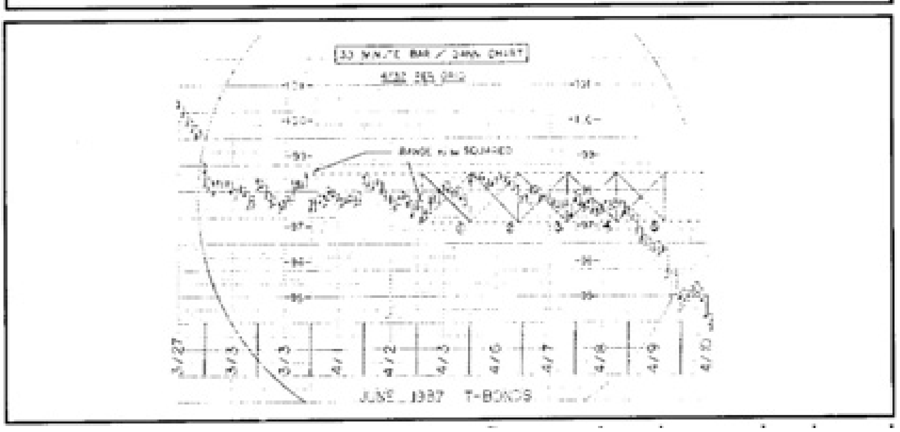
JUNE 1987 T-BONDS

which is always accumulation or distribution, and breaks into new high or low territory, then you can trade in it with some certainty of having determined the correct trend." He went on to say that the narrower and longer the range was, the greater the expectancy of continued move when it finally broke out. Most traders like to compare apples with apples, as it were, in the market. In searching for proper ranges to get consistent performance for examination, we need constants to base against. Prices move up and down. Time constants never change, so it is the proportion of time and price (Gann's discovery) that makes it possible to compare a range of one market and time, and another.

This proportion of range size (price) versus length in time is perfectly handled with Gann's technique of squaring the range. He considered it "one of the most important and valuable discoveries" he had ever made, it rally was. When a market range is "squared" by time; meaning an equal number of units of time elapsing as units of price determining the size of the range; important changes in trend take place.

Gann students in general understand the concept well. The examples given are to show you an application of the important principal instead of completely explaining it in detail. How many squares the market has gone through with out breaking either the high or low determines the potential of a strong move when it leaves its range. Gann said to watch in particular the 3rd and 4th square; and then if it still was in the range; the 7th and 9th squares. When I go searching for a potential trade bases on ranges, I eliminate all ranges less than 3 squares in length. If you do this, watching all commodities, you should find about 10 or so situations a year.

I have found an EXTREMELY STRONG tendency for the markets to move exactly to a multiple of the range(s) it just left. The examples I have shown here are just a small sample of the more than 500 squared ranges of 3 squares or more that I have studied, roving to me the validity of a range's forecasting ability, this has application for even shorter time periods. I have included the 1987 June T-Bond example to show the way to do it correctly and the importance of squaring intra-day ranges for timing.

Since a market's tops and bottoms are created by its own unique sensitivity to ever-present time cycles, it is logical to assume that tops and bottoms of ranges are functions of time. By remaining in a range. The option is respecting the time cycles that are rising and falling within the range, defining yet other swing tops and bottoms because of smaller magnitude cycles. The longer that a market is trapped in a range, the greater the magnitude of time cycle contained. When broken, the major cycle leaving a range of 6 months duration should be a minimum of 1 -3 years in period.

To use this concept in actual trading, here are some suggestions:

1. Wait for a market to square out a range of 2 squares or more.
2. Watch the position of the market reference to 50% point in the range in the 3rd, 4th, etc., square to get indication of possible direction of break.
3. Buy or sell breakout of the range, at market or on stop. In an upside break place a stop-loss order under the last swing bottom prior to the breakout. Reverse if the breakout.
4. Consider the 1st multiple of the range the first possible target to be reached before some greater reaction. If this price is exceeded and closed beyond, watch other multiples and divisions of the range for reaction points both up or down.

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W D. Gann's The Tunnel Thru The Air

By Jim Purucker

Haven studied Gann's voluminous material since 1977, the book which intrigued me the most was, "The Tunnel Thru The Air", written in 1927. In the forward, Gann states the book is mysterious and contains a valuable secret", clothed in veiled language. Finding this secret was an exhilarating experience. However, I could not have found it without a basic course in Astrology and the ability to use an Ephemeris.

Gann states the purpose of the book is to teach the immutable laws of nature. Immutable laws are laws which man cannot change, such as the change of seasons, weather (floods, famines), earthquakes, volcanoes and specifically the rotation of the planets and their geometrical relationships to one another. The book reveals this valuable secret by describing natural astrological cause and effect timing points, where like causes produce similar effects.

One of the greatest keys to successful trading is following these natural laws of vibration. With the secret, I was able to prove, through practical application of this timing point, Gann's Cotton trade of 1926-27, his Rye trade of 1925 and 1945, and his Coffee trade of 1954. I had found the correct beginning point to trade the minor cycle of one year. The next step involved a simple, but effective, means to square time and price from the astrological zero or beginning point. This is when I discovered the value in the square of "9". By placing an overlay over the square of "9". anchored at the center, with calendar dates on the perimeter ("a wheel within a wheel"), I could simply square price and time from any price and any date. Thus, the credit given to Gann for this innovation in naming this lifetime trading tool, "The Gann Wheel".

Because 85% of anything we learn is from what we see, I had the secret to the timing points which I could SEE WHEN they would occur in the future (Ephemeris), and the ability to SEE price and time square on the GANN WHEEL.

The last step I wanted was a reliable price chart pattern which formed at and around the vibration points to make the greatest amount of profit in the shortest period of time. Why'? Gann said. "It's much better to trade 3 or 4 times per year and make large profits, than to make 100 to 200 trades per year and be wrong half the time and finally ending up with a net loss". I finally found a reliable chart pattern which I could SEE develop at the vibration points. By using simple Gann techniques, I developed a trading plan of WHEN and HOW to enter this pattern, with a defined risk (stop). The entry in this pattern confirms the start of Gann's second section, confirms always selling the first rally or confirms buying the first break, (for ELLIOTTICIANS, confirms that start of the third wave), the biggest and best part of the price trend. The profit objective is determined by one or more squares of price on the GANN WHEEL.

TRADING EXAMPLE

LONG TRADE:
(1) Natural TIME vibration (4-13-87)'
(2) Plus 90' Square (3 months (calendar days) or (64/67 market days) (7-15-87)
(3) 59.90 Price Square, 90' (GANN WHEEL)

SHORT TRADE:
PRICE PATTERN for the greatest amount of profit in the shortest period of time. The pattern is defined by the word G-A-N-N2-S (the S is for SHORT). Enter trade by drawing 1X1 angle from N2. Enter SHORT M.O.C. on CLOSE below 1X1 angle, at 57.40 on August 5th. Place buy stop at S (defined risk) 59.60. Next, place order to add to SHORT position by drawing a horizontal line from (A). Enter SHORT M.O.C. on CLOSE below horizontal line at 55.50 on August 14th. Next, lower stop to original enter on both positions to 57.40 (buy stop). Next, place open buy order to cover both SHORT positions at 51 .00 (180' opposition from 4-13-87 on GANN WHEEL). Order filled on 8-24-87 (cancel buy stop at 57.40).

Veiled Language Uncovered

By James Hyenzyk

It is my understanding that W.D. Gann wrote many of his books and courses in a hidden, veiled language. This was done intentionally. However, it was not designed to deceive the public. He was merely writing in the tradition of the Great Masters who wrote n the language of the astrologer. These Great Masters not only knew what to write but when to write. Gann considered himself to be a Great Master who had something to say and knew of something which would cause his writings to be read and reread by the world-at-large. Gann like the Great Masters like the Great Masters knew of and took advantage of a Time Factor which produces or creates permanency and constant reproduction. This Time Factor was the "when" to write. This is why Gann's work is still popular today over 30 years since this death.

The purpose of this article is to reveal a few of the hidden astrological references that Gann scattered throughout his books and courses. By no means is this to be construed as a complete list of astrological veils. I am sure that Gann's genius has hidden many that are well beyond the scope of my knowledge.

One of the first astrological references that I discovered while researching Gann's work dealt indirectly with the markets. Instead, it was a reference to a natal chart of an individual. In his booklet, W.D. Gann, Economic Forecaster, Gann stated that he would only sell his courses to people who met his requirements. If he felt that after a thorough investigation a person would not make a success trading his method, he would 'refuse" to send them the course. I believe that this "thorough investigation" was based on Gann's interpretation of the individual's natal chart.

Gann used basic natal chart delineation to determine if a client has a strong fifth house emphasis. The fifth house is considered by astrologers to be the house of speculation. If he found a strong fifth house emphasis, he figured that the individual would be drawn to speculation. He also looked at the money or second house to see if there was a connection to the fifth house. Finally, Gann looked for favorable aspects to the planets in these two houses. By studying the cycles and patterns in an individual's chart, Gann was able to determine if success would come easily, or if it would have to be earned. He probably refused to send his course to individuals whom he felt would have more success in areas of life other than money.

The Gann Commodity Course is another good source for hidden astrological references. For example, in has chapter on Forecasting Grains by Time Cycles, Gann states that "Bottoms and tops change over a period of years not only because Supply and Demand change, but because the forces or causes of price change and on account of longitude and latitude. The cycle that it is working in either forms squares or triangles which lowers or raises prices according to the forces which produce the energy that causes the moves." This paragraph in the course may not make sense to the average reader because it was written in the language of the astrologer.

The key words of this most interesting paragraph longitude, latitude, square and triangle are all basic astrological terms. Longitude is important because it is the primary tool of the astrologer. It is the distance, angle or aspect, measured along the elliptical path of al the planets from the beginning of Aries to the end of the sign Pisces. The latitude is the distance or angle, expressed in degrees north or south of the elliptical path. Squares which are considered bearish refer to planets 90 degrees apart. While Triangles or Trines which are considered bullish are 120 degrees apart.

Gann based his financial astrology theory on the premise that planetary longitudes could be converted to price. By doing this he as able to determine which planets were providing support and resistance to the markets. There is also evidence that Gann thought the planet Jupiter has a positive effect on the market that encouraged expansion in price. Saturn on the other hand was considered negative and restrictive to the market.

Taking all of the above into consideration, it can be determined that Gann believed markets make tops and bottoms based on the longitude of the active planets, namely Jupiter and Saturn. He also believed that as long as a price is 90 degrees or square to another planet, the market could move lower. In addition, a strong up move would be expected if the price were 120 degrees or trine to a planet.

Finally, the best source of Gann's astrological theories is the book Truth of the Stock Tape. If studied carefully, this book will reveal to one Gann's use of the phases of the moon, the lunation chart and the solar ingress chart in putting together a one-year forecast. Gann also discussed how he determines the swings of the Stock Market by using a Time Factor, the commodity curve, the money curve, and the curve of stocks. I strongly recommend that the serious Gann student use this book in combination with the Gann Commodity and Stock Course to develop a better understanding of how to forecast the markets.

In conclusion, as I mentioned in the first paragraph Gann wrote in a hidden, veiled language. He also stated several times in his works that it was not his aim to explain the causes of cycles. He felt that the general public was n M ready for it and probably would not understand or believe it if he explained it. Keep this in mind when you read his works and continue to look for the hidden meaning.

Jim Hyerczyk is a member of the National Council of Geocosmic Research. Also publishes a newsletter on Gann and Financial Astrology. He can he reached at P.O. Box 702, Worth, Illinois, 60465, (800-777-6060 and (312) 444-1155.

Continulink Data

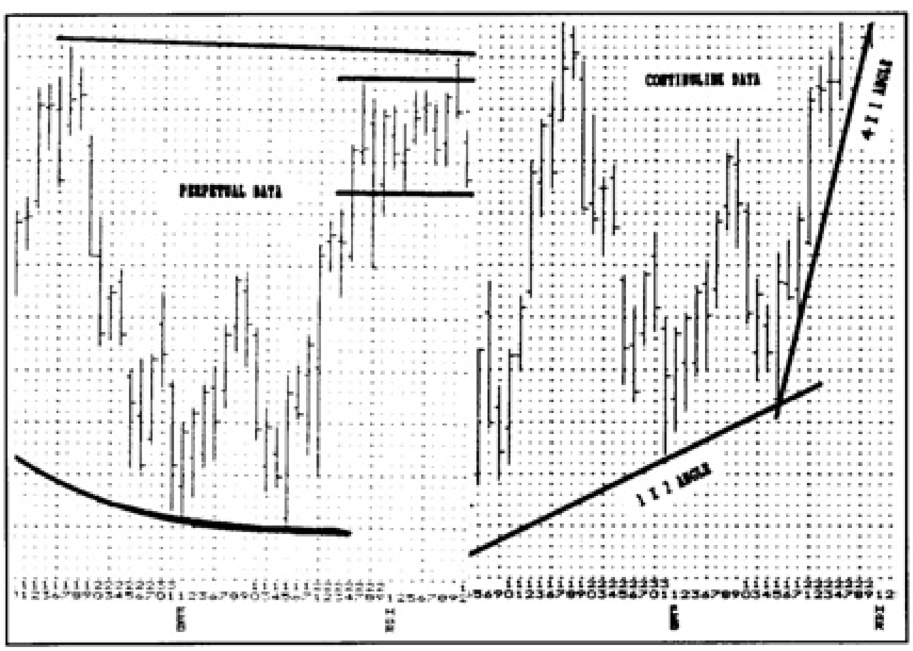
By David Green

Up until now, there have been three major methods of maintaining data and generating charts based on the data. They are as follows and probably account for 98% of data bases in use: One popular method is CSI Perpetual data. This method uses both a nearby contract and the next out contract. The two contracts prices are then averaged and time weighted.

Use of Perpetual synthetic data could result in your trading system giving false signals this is due to the price configuration being distorted due to the strong effect of the back contract. The back contract may display a much different signature and price pattern that the nearby contract your are trading. This can be due to seasonal factors. fundamentals, or thin volume compared to the nearby. In addition, the positive or negative contract premiums can cause major problems as it can distort the actual trend indicated by the nearby contract your are trading. This effect caused by increasing/decreasing spread premium can cause a pronounced change over time to the overall trend appearance.

Another often used method is nearly continuation data. Charts based on continuation data will result in price discontinuity and frequently large gaps, at contract rollover time. The gaps can have a dramatic effect on trading system indicators and also greatly alter chart perspective for “chart traders”.

An additional well promoted method is Gann style data. Gann concept follows a specific contract for its life right from the start of trading. This is the opposite of continuation data that is constantly tracking new contracts. The major disadvantage to this method is that it can only be used with the W. D. Gann method of trading using Gann angles and time and price squaring. It doesn’t work well with moving averages and various types of computer oscillators. None of the three popular methods above, due to the various reasons outlined, can be relied upon for



computer trading systems. None of the methods are truly valid for systems that rely heavily on price patterns, open-high-low-close relationships or chart trend perspective. All three methods are also of questionable or little value for long term back testing or development of a trading system.

A fourth method is proposed that will hopefully become widely used for computer trading systems in place of the three currently popular methods. Continulink data and charts generated from the data will solve all the problems alluded to and is by far the best method for computer trading systems. With this method you will only follow and maintain data on the active nearby contact being traded. The Continulink concept is based on mathematically linking the contract months on a pre-specified rollover date schedule. This is accomplished by back-adjusting all the historical data so that it corresponds to the new contract being followed and traded. To exemplify, the spread premium differential between the expiring and new contract is either added to or subtracted from all the historical data at rollover time. Once rollover takes place the date is maintained with the actual nearby prices being entered each day until the next switch over date occurs. There is an easy-to-use computer program to perform the rollover, back adjustment and management of historical data from the Trend Index Company.

David Green, Trend Index Company, Box 5, Altoona, WI 54720, (715)833-1234.

Mass Pressure Chart

By Nick Flamhouras

I started studying the works of the late W.D. Gann in 1973. The Dow Jones Industrials make their high in January of the year and were on their way to their ultimate low of 569 in December of 1974. the grains were in the bull phase os their cycle which would take the soybeans to almost $13.00 a bushel by June.

What was the driving force behind these bull and bear cycles? After much detailed study Mass Psychology was the obvious answer. But what good was this knowledge without knowing ahead of time when they would occur? Evidently, Mr. Gann found the answer, as a study of his now famous yearly forecasts would attest. It would take me almost ten years of study, pouring over historical data and re-reading his writings hundreds of times before I would have the correct “mind set” to understand.

For those of you interested in making these types of forecasts. I suggest you study any literature on astro-cycles as herein lies the answer to acquiring the correct mind set. What is meant by the mind set? This is the term used to describe when your mind is ready to accept certain laws. Until this time your eyes will see the answer, but your mind will not believe what it sees. I don’t have enough space in this article to teach a complete course in astro-cycles, but there are some key angular relationships that should help you.

First, Mr. Gann teaches us to look for changes in trend every 90, 180, 270, 365 days for important highs and lows. This is because the sun moves roughly one (I) degree per day; thus, after 91 days or 13 weeks the usn is square or 90 degrees from the high or low you started your count from. A time to start watching for a change of trend either major or minor. We would use the same reasoning 183 days later when the sun was in opposition (180 degrees) from its place at the low or high and start looking for technical indications of a change in trend. Now, we can use these same key angles in our astro observations to help us find termination points.

In this example I will use the cycle of the planet Jupiter. When the Dow made its low in August 1982 Jupiter’s position was 212 degrees longitude. In August of 1987 when The Dow made a top around 2700, Jupiter’s new position as 29 degrees longitude or 183 degrees to its starting point in August 1982.

A point in time to start looking to our technicals for an indication of a change in trend. Are these astro-cycles merely “coincidental”, maybe? But who cares as long as they can help us become successful. If you did not have the correct mind set you would not have believed this cycle would be a valid one to observe. Don’t forget that “Nature does not cease to exist where we cease to perceive her.”

I have enclosed my 1987 annual forecast for The Dow Jones Industrials Averages and carried it out into the end of February 1988. Let’s start with January 1987. Note the Mass Pressure Chart indicated a move to March 11 and then a decline. Actual top on The Dow was April 7 (27 days) later. When the Dow made the low on may 19 the Pressure Chart was indicating May 18. From here the forecast was for slightly lower prices until June 18. As you can see, The Dow was showing considerable strength by moving higher while the Mass Pressure

Chart was moving lower. From here we get back in gear as the MPC was indicating upward pressure until August 13. The actual tip was made on August25 (12 days later). Now, it gets interesting; the MPC was showing a building up of negative pressure which would not subside until October 20 and although The Dow stayed in a tight range at high levels between August 25 and October 2 it had to play catch-up to balance out time on October 20. Also note I have drawn an angle (A) off the forecasted top of March 11 which coincided with the low of October20 on the MPC. I also drew and angle (B) from the actual top of April 7 which also caught the low of The Dow on October 20. Powerful stuff!

The first two months of 1988 look sideways to somewhat lower. From here, the market should trend higher moving above and below Angle B until October to November 1988. Past performance in no way can assure future forecasts will be as accurate as these have been. These road maps of time should be considered just another tool in our quest for market profits.

Annual Forecast of the Dow Jones Industrial Average