Gann's Law of Vibration Decoded

By Gregory and Helen Meadors with Neal Chabot, Ph.D.

As a young stockbroker, W.D. Gann already suspected that there were unseen causes, operating behind the scenes, that were responsible for certain price movements in stocks and commodities. He liked to think that these hidden causes were part of a natural law that was secretly at work in the markets. As he acquired more knowledge and developed his theories, Gann systematized his theory of price movement and called it the "Law of Vibration ". "

Gann's "Law of Vibration" has never been fully published. Gann kept his deepest secrets out of the popular books that he wrote about the markets, so it is difficult to reconstruct the precise steps by which Gann acquired his knowledge and developed his theories. When Gann did choose to be more revealing about his system, he did so in the supposedly fictional book Tunnel Through the Air The best description which Gann gives of his secret principles is in the 1909 interview he did for Ticker Magazine (later called the Wall Street Journal). Based upon the quotations in this interview, our article will elucidate the nature of Gann's "Law of Vibration."

In the Ticker Magazine interview Gann states, "In going over the history of markets and the great mass of related statistics, it soon becomes apparent that certain laws govern the changes and variations in the value of stocks and there exists a periodic or cyclic law, which is at the back of all these movements. Observations have shown that there are regular periods of intense activity on the Exchange followed by periods of inactivity."

"I soon began to note the periodical recurrence of the rise and fall of stocks and commodities. This led me to conclude that natural law was the basis of market movements. I then decided to devote ten years of my life to the study of natural law as applicable to the speculative markets and to devote my best energies toward making speculation a profitable profession."

Gann believed that all successful men, be they scientists, doctors, or businessmen, have devoted years to the study of their particular professions before attempting to practice them. Similarly, Gann spent many years in the pursuit of knowledge in order to turn his speculation into a profitable profession. Although we do not know all the sources Gann studied during this ten year period, we do know they included symbolism, geometry, mathematics, numerology, astrology, and the Bible.

With regard to esoteric symbolism, our previous article entitled, "Symbols, Numerics and

the Law of Vibration" demonstrated how both hidden knowledge and scientific principles are revealed in the symbolism of the Great Seal of the United States. Likewise, the symbolism of the U.S. Treasury Seal also provides keys to secret knowledge. (Figure 1)

The "Law of Vibration" which Gann discovered was far removed from something like probability theory. Rather it was a definite and precise way of forecasting prices, in accordance with periodic law. As he stated, "After exhaustive research and investigations of the known sciences, I discovered that the Law of Vibration enabled me to accurately determine the exact points to which stocks or commodities should rise and fall within a given time. The working out of this law determines the cause and predicts the effect long before the Street is aware of either."

This makes it clear that Gann was working not just with time cycles, but with actual resistances and support points in prices themselves. Even more surprising, Gann says that his discoveries apply not only to long term movements, but also to short term trades, and even for day trading!

"The law which I have applied will not only give these long cycles or swings, but the daily and even hourly movements of stocks. By knowing the exact vibrations of each individual stock I am able to determine at what point each will receive support and at what point the greatest resistance is to be met."

It is apparent that Gann is talking in this interview about a law of vibration which is intrinsic to the stock or commodity. In other words, the law of vibration operates from within the particular entity. The stock or commodity is not something entirely passive that is acted upon by an outside force. Gann refers to a stock or commodity as if it is actually a live entity, possessing its own particular vibration: "I have found that in the stock itself exists its harmonic or in harmonic relationship— the driving power of force behind it. The secret of all its activity is therefore apparent. By my method I can determine the vibrations of each stock and by also taking certain time values into consideration I can in the majority of cases tell exactly what the stock will do under given conditions."

"From my extensive investigations, studies and applied tests, I find that not only do the various stocks vibrate, but that the driving forces controlling the stocks are also in a state of

Figure 2

vibration. These vibratory forces can only be known by the movements they generate on the stocks and their values in the market. Since all great swings of movements of the market are cyclic, they act in accordance with periodic law."

Since most vibrations we are familiar with can be mathematically described, it is evident that Gann was using mathematical calculations—the algorithm of his "law of vibration" —to describe and predict the movement of prices. What is also clear is that Gann is referring to a dynamic system with two centers of operation, physical and metaphysical. It is not just a linear cause-effect relationship from point A to point B. Rather, there is a unique bipolar relationship in which a stock or commodity is acted upon or changed by a larger causal influence in accordance with natural law. And, being acted upon by this larger causal influence, the price of the stock or commodity is modulated according to its own particular vibratory pattern. The stock or commodity price then reacts upon the larger vibrations (feedback loop) so that the result is both unique and predictable. It is not a simple one-way mechanical system, but a complex interplay of vibratory rates which are mathematically determinate and descriptive.

"Thus I affirm, every class of phenomena, whether in nature or in the stock market, must be subject to the universal law of causation and harmony. Every effect must have an adequate cause. If we wish to avert failure in speculations we must deal with causes. Everything in existence is based on exact proportion and perfect relationship. There is no chance in nature, because mathematical principles of the highest order lie at the foundations of all things."

What does Gann mean in saying that the vibratory forces are from the "highest order"? As we have demonstrated in previous articles, we need the understanding of "heavenly wisdom"—the knowledge of cosmic and planetary cycles. Some are familiar with cycle research which attempts to understand the many price cycles in the markets, but many times this study is confused by the fact that almost all of these supposed regular cycles are in fact irregular, occurring at varying intervals. However, by looking upward to heavenly phenomena and planetary cycles, we readily observe both regular (heliocentric) and irregular (geocentric) cycles. For those who wish to understand how such influences are possible, it has been documented for some time that cosmic patterns and celestial events affect man's psychobiological rhythms (mass investor psychology).2

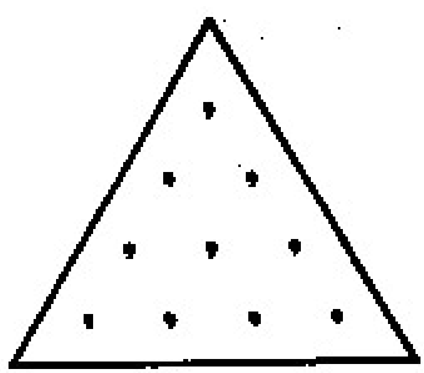


Figure 5

THE TETRACTYS

Theon of Smyrna declares that the ten dots, or tetractys of Pythagoras, was a symbol of the greatest importance, for to the discerning mind it revealed the mystery of universal nature. The Pythagoreans bound themselves by the following oath: "By Him who gave to our soul the tetractys, which hath the fountain and root of ever-springing nature." (From the book *Secret Teaching of All Ages* by Hall)

scale, where numbers and ratios deter-

In the same interview, Joann talked about stocks as if they possessed some numeric life all their own: "Through the Law of Vibration every stock in the market moves in its own distinctive sphere of activities, as to intensity, volume, and direction; all the essential qualities of its evolution are characterized in its own rate of vibrations. Stocks, like atoms, are really centers of energies, therefore they are controlled mathematically. Thus, to speculate scientifically, it is absolutely necessary to follow natural law "

Of all the ancient sources which Gann studied, perhaps the one who most influenced him was Pythagoras, who started a school of philosophy which believed that an object could be understood by knowing its number. In fact, the number was identical to it's very essence. Everything is categorized as active or passive (cp. yin and yang) depending on whether its number is odd or even. Pythagoras is credited with the discovery of the diatonic scale, where numbers and ratios determine the whole science of music. A vibrating string on a musical instrument which is twice the length of another (2:1 ratio) will produce a note which is an octave lower. Similarly, a 3:2 ratio will produce a fifth on the scale, while a 4:3 ratio will produce a third on the scale. This discovery of the seven-fold scale was confirmed in the field of chemistry with the discovery that elements in the periodic table of atomic weights repeat characteristics in groups of seven—at every eighth atomic number.

The key to all harmonic ratios is the Pythagorean tetractys, his supreme symbol of universal forces and processes (Figure 3). In this pyramid of dots made up of the first four numbers—1, 2, 3, and 4— there are embodied all sorts of correspondences between numbers, ratios, and their harmonics of vibration (notes on the scale). Having established music as a science with its exact harmonic ratios, Pythagoras proceeded to divide creation, according to the law of harmonic intervals, into proportionate planes and spheres, each of which was assigned a number, tone, harmonic interval, and color. Gann's "Law of Vibration" incorporates Pythagoras' law of harmonic intervals. It is obvious that Gann drew heavily on Pythagorean mathematics when he developed the squaring of price and time and the ratios by which highs and lows could be divided.

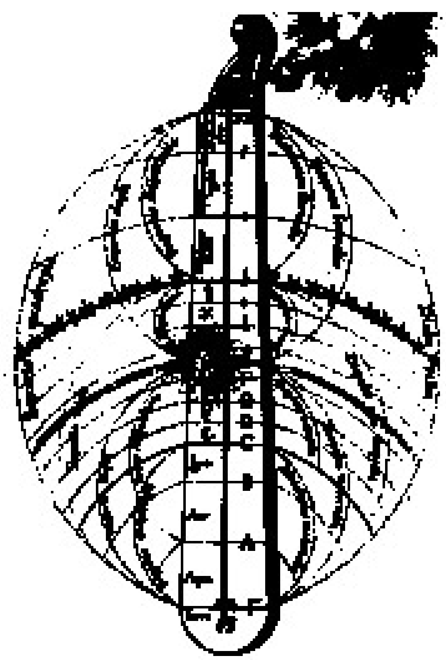


Figure 4

The Mundane Monochord with its proportions and intervals. (From Fludd's De Musica Mundana)

DATE	TIME	P1	ASP	P2
FEB 05, 1980	08:30 PM	[illegible]	△	[illegible]
AUG 30, 1980	03:54 PM	[illegible]	△	[illegible]
MAR 24, 1981	01:40 AM	[illegible]	△	[illegible]
JUN 26, 1981	09:13 PM	[illegible]	△	[illegible]
MAY 07, 1982	06:21 AM	[illegible]	△	[illegible]
AUG 14, 1982	06:46 PM	[illegible]	△	[illegible]
MAR 02, 1983	00:50 AM	[illegible]	△	[illegible]
JUN 12, 1983	01:04 PM	[illegible]	△	[illegible]
APR [illegible], 1984	07:[illegible] AM	[illegible]	△	[illegible]
JUL [illegible], 1984	05:17 AM	[illegible]	△	[illegible]
FEB [illegible], 1985	01:46 PM	[illegible]	△	[illegible]
MAR 25, 1985	06:54 AM	[illegible]	△	[illegible]
MAY 29, 1985	08:47 PM	[illegible]	△	[illegible]
SEP 04, 1985	08:00 PM	[illegible]	△	[illegible]
MAR [illegible], 1986	11:[illegible] PM	[illegible]	△	[illegible]
JUL 02, 1986	08:22 AM	[illegible]	△	[illegible]
MAY 13, 1987	11:28 PM	[illegible]	△	[illegible]
AUG 17, 1987	01:38 PM	[illegible]	△	[illegible]
MAR 06, 1988	08:08 PM	[illegible]	△	[illegible]
OCT 08, 1988	00:54 AM	[illegible]	△	[illegible]
APR 21, 1989	00:18 AM	[illegible]	△	[illegible]
JUL 28, 1989	03:38 PM	[illegible]	△	[illegible]
JUN 06, 1990	12:26 PM	[illegible]	△	[illegible]
SEP 11, 1990	04:08 PM	[illegible]	△	[illegible]

Figure 5

DATE	TIME	ASPECT
AUG 07, 1987	11:24 AM	☉ △ ♄
AUG 10, 1987	09:53 PM	♀ △ ♄
AUG 11, 1987	10:54 AM	♂ △ ♅
AUG 14, 1987	01:11 AM	☿ △ ♄
AUG 16, 1987	00:24 AM	☉ △ ♅
AUG 17, 1987	02:36 PM	♀ △ ♅
AUG 18, 1987	02:18 AM	☿ △ ♅
AUG 21, 1987	01:16 PM	☿ △ ♃
AUG 22, 1987	04:19 AM	♂ △ ♃
AUG 23, 1987	03:25 AM	♀ △ ♃
	03:56 AM	☉ △ ♃
AUG 24, 1987	11:01 AM	☿ △ ♆
AUG 27, 1987	04:32 PM	☿ △ ♆
AUG 28, 1987	11:44 PM	☉ △ ♆
AUG 29, 1987	05:55 AM	☿ □ ♄
AUG 30, 1987	11:13 PM	♂ △ ♆
SEP 03, 1987	00:12 AM	☿ □ ♅
SEP 04, 1987	08:28 AM	☿ □ ♄
SEP 07, 1987	07:27 PM	☉ □ ♄
SEP 10, 1987	03:48 PM	☿ □ ♆
	08:16 PM	♀ □ ♅
SEP 15, 1987	08:32 AM	♂ □ ♄

Figure 6

Certain planetary cycles and patterns have historically proven to be highly accurate for timing market trends and turning points. For example, the Venus Trine Uranus Cycle is a good short term indicator. Whenever Venus (♀) forms the geocentric 120 degree angle (trine △) with Uranus (♅), the Stockmarket moves up two weeks prior to the date when the angle (aspect) is exact. This biannual cycle has been 88% accurate during the last 100 years and 100% accurate during the last 8 occurrences (4 years). The Stockmarket often declines after the completion of this cycle unless there are other positive influences evident. The above chart provides the time when the Venus Trine Uranus aspect is exact for a 10 year period. (Produced by the Blue*Star program from Matrix Software).

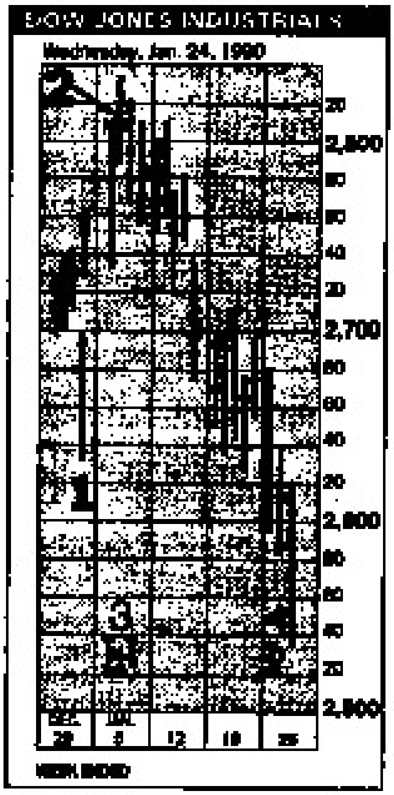


Figure 8

In the December 27, 1989 issue we stated "...we are looking for a major low around January 15th or 19th.... Longer term investors should continue to sell on rallies (1). In the November 29, 1989 *Market Systems Newsletter* we stated "we certainly expect a tradable counter-trend move to start around the New Year (2). We quoted our newsletter of the previous month of May in saying, "This will be followed by a major decline into Jan 19, 1990. Mark these dates on your calendar." Our 1989 forecast for a top at the New Year and decline into mid January 1990 was based, in part, upon the 84 year Uranus cycle and planetary harmonics. On January 1, 1990, the planet Uranus returned to the exact degree in the heavens where it was at the major Stockmarket top on January 19, 1906 (84 years ago). During mid January the planet Saturn reached 17 degrees 20 minutes which was an exact harmonic of Saturn's position which was 17 degrees 20 minutes at both the August 6, 1982 low, and the October 19, 1987 Crash low. Again, Gann's primary source for superior market timing was knowledge of the Heavenly music, which sings (celestial harmonics) with the knowledge of coming events. (Job 38:6-7, 31-33; Psalms 19:1-3).

fect a particular stock or commodity. This

The Electromagnetic Spectrum

Frequency Hz			*Wavelength* m
10^{24}			
	cosmic rays		10^{-16}
10^{22}			
			10^{-14}
10^{21}			
	gamma rays		10^{-12}
10^{20}			
	X-rays		10^{-10}
10^{18}			
	ultra-violet		10^{-8}
10^{16}			
	visible light	blue red	10^{-6}
10^{14}	infrared		
			10^{-4}
10^{12}			
	microwaves		10^{-2}
10^{9}			
	radar		
	U.H.F.		1
	V.H.F. F.M. radio		
	television		
10^{7}	shortwave radio		
	A.M. radio		10^{2}

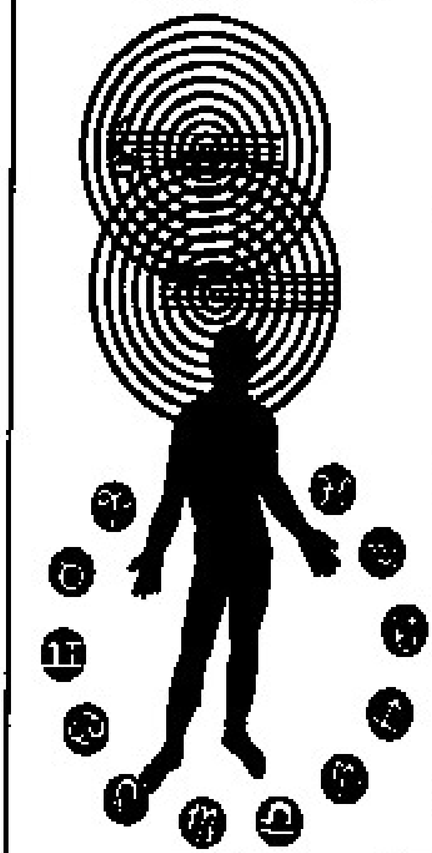


Figure 7

Just as man is influenced by sight and sound vibrations, he is also influenced (subconsciously) by other unseen light vibrations of cosmic origin (see electromagnetic spectrum) which impinge upon his (electromagnetic) nervous system. Picture courtesy of Richard C. Lewis from the book The Second Word and its Creative Overtones.

A lesser known part of the Pythagorean system includes numbers ruling planets and the ratios of their orbits, which are in a harmonic relationship to each other.

Pythagoras believed that each planet corresponded with a note on the musical scale, and the distance between orbits reflected the vibratory ratios on the musical scale. This harmonic organization of the cosmos was called the "music of the spheres." Each planet was said to occupy its own sphere of influence, called a "heaven", and the Greeks recognized seven heavens, a concept which is also found in the Bible. Thus, Pythagoras conceived the universe to be an immense musical instrument, with its strings connected at their upper end to "absolute spirit", and at their lower end to matter— thus forming a chord stretched between heaven and earth. (Figure 4) Pythagoras believed that the heavens ascended in their order beginning with the sphere of the moon, which would be the first heaven.

In a previous article we explored the harmonic relationship between the planets which occurred at the August 1987 Stockmarket top, which prefigured the following decline (Figure 5). Similarly, there are geometric patterns or aspects between various planets which affect the Stockmarket. Some of these have proven to be good short term indicators. For example, whenever Venus forms the geocentric 120 degree angle (trine) with Uranus, the Stockmarket moves up two or more weeks prior to the date when the angle is exact (Figure 6).

A lesser known discovery regarding planetary influences is that the Stockmarket can be affected significantly when certain planets are located at sensitive degrees in the zodiac. For example, the planet Saturn was located at exactly 17 degrees 20 minutes within various zodiacal signs, on at least three significant occasions: during the December 1974 bear market lows, at the August 6, 1982 low, and the October 19, 1987 low of the Stockmarket crash. It again passed through the 17th degree during mid January 1990 generating a major decline as forecast months in advance in our Market Systems Newsletter.

Perhaps the most significant point Gann makes about the "Law of Vibration" is that "these vibratory forces can only be known by the movements they generate on the stocks and their values in the market". In other words, to obtain a high degree of accuracy when applying natural laws one must establish through empirical research which of the vibratory forces affect a particular stock or commodity. This can only be ascertained by doing original research to discover the historical correlations!

The problem with traditional astrological analysis is that it is beset with many preset "rules" developed for the purpose of interpreting human behavior and forecasting events. Many of these rules fail to work when applied uncritically to the markets. Some financial astrologers still rely on theories of planetary causes and effects stemming from the Middle We are fortunate to live in the "information age" where ancient sciences can be tested by a modern database of historical prices to give us new knowledge or confirmation of old knowledge.

To obtain a true understanding of "heavenly wisdom" one must "prove all things" by seeking to find the historical correlations for particular markets. By doing research one can discover how cosmic events combined with other natural laws correlate with market movements. We have clearly demonstrated this by maintaining an amazing 90% accuracy in forecasting turning point dates in our Market Systems Newsletter.

Gregary LeGrand Meadors is the author of the Genesis Market Timing Courses and with Dr. Neal Chabot publishes theMarketSystemsNewsletter. last year/$266) Helen Meadors is co-editor, and Executive Director in charge of Public Relations. For information call or write: Genesis Capital Management, 2761 Mansf eld Dr., Burbank, CA. 91504 (818) THE-GANN (843-4266)

Predicting Stock Market Crashes

By Chris Kakasuleff

It's not necessarily time that causes major market crashes, but instead the distance between major geometrical angles at important points in time.

On August 12, 1982 the Dow closed at a bear market low at 777. Four years later, on September 29, 1986, the low closed at 1755.

This 1000 point gain in four years was considered the most bullish time window in American stock market history. These market historians, in their wildest dreams, could not have predicted that eleven short months later the Dow would gain an additional 1000 points, closing at 2722 on August 25, 1987.

My reference to this information is to point out that in order to cash in on a market crash, there must be an extended volatile move in one direction. Eventually, this move in price will run into major resistance against a major Gann angle on a Gann monthly geometrical chart. This is precisely what happened in August, 1987.

This major monthly Gann angle was the 32 X 1 (an angle gaining 32 points per month) from the August 12, 1982 closing major bear market low at 777. This angle had grown to 2,710 intra month on August 25, 1987.

It had been many years since the Dow in price had penetrated this angle. But, that's precisely what price did on August 25, 1987, as the Dow closed at its all time high up to that time at 2722.

This 32 X 1 geometrical angle was 60 months old on August 12, 1987. This major time wheel of 60 months is 1/6th of the circle of 360 months.

The mathematical equation would be to multiply 32 points per month times 60 months equals 1920 Dow points plus the bear market low of 777 equals super resistance at 2697 for the Dow on August 12, 1987. This formula guaranteed a major change of trend.

This time period also was 5 years from the bear market low in August, 1982. Gann explained many times about the importance of 10 year cycles. His general rule was to expect a top 5 years from a major bottom, and then another bottom 10 years from the previous bear market low.

This low points to August, 1992. This will coincide with another major anniversary date.

On May 17, 1992, the New York Stock Exchange will be 200 years old. The natural square of the New York Stock Exchange is 20 X 20 equals 400.

This very reliable metaphysical system is wonderful for finding support and resistance on the NYSE Index.

You simply construct a table chart with each row containing twenty numbers placed vertically. At the end of row one you have the number 20. Row two starts with 21 and ends at 40, etc., until you've counted twenty rows which ends at 400.

You then divide the chart into quarters vertically, and horizontally, and draw in your 45 degree angles.

Notice that the NYSE ran into major resistance at the halfway point of this table chart at 200 and we're only 2 years from the bicentennial anniversary date of 200 years.

Why did I call this a metaphysical system?

I derived at this system by simply adding up the letters in the words New York Stock

Exchange, of which there are 20 letters.

My philosophy is, if it works consistently, it must be one of the foundations of the laws of nature, therefore, I don't hesitate to use it as a tool.

I highly recommend a book called Table Charts for Time and Price Projection by L.L. Jacobs, as a teaching tool for these systems.

Meanwhile back to the future. This year of 1992 will also be 60 years from the modern all time low on the Dow at 41, set on July 8, 1932.

Does it sound like I'm suggesting that you should sell your seat on the New York Stock Exchange? Hmmmm!

Let's resume our conversation about Gann monthly geometrical angles, and their ability as a predictive tool to foretell future events on the Dow Jones Industrial Averages.

Since the Dow low in December, 1974 at 577, all bull market have abruptly ended and have become bear markets when the Dow penetrated and fell below the 16 X 1 monthly angle. (An angle gaining 16 points a month from a bear market bottom). This was confirmed each time when the Dow made bear market tops against this angle and would then sell off.

The 16 X 1 monthly angle rising from the December, 1974 low was broken on the downside by price in January, 1977. This signaled the end to the 1975,1976 bull market.

The dominate resonance of group consciousness in the stock market became pessimistic, when suddenly there were more sellers than buyers.

The gravity center between optimism and pessimism at 16 X 1 had lost it's momentum on the upside.

In May, 1981, the Dow faltered through the 16 X 1 monthly angle rising from the April, 1980 low, forewarning the spirit of Gann, and all connoisseurs of Gann to cash in their chips and go on a cruise.

The current long term bullish to bearish gravity center 16 X 1 monthly angle began it's life on August 12, 1982.

The Dow flirted with this angle on the downside, many times in the second half of 1984. It instead proved to be a support level for changes of trend to the upside, and the bull market resumed it's charge in 1985. Did you ever notice the Dow always likes to be bullish in years ending in 5? Could it be the planet Mercury?

As I said earlier, on August 25, 1987, the Dow was making history by setting an all time high at 2722.

I also mentioned that at the very same time, the Dow in price, was caressing the 32 X 1 sister monthly angle growing from the same low from August 12, 1982. In addition, I mentioned this angle was crossing 2,710 on August 25, 1987.

The 16 X 1 sister monthly angle closed at 1745 on this same date. A major change of trend was quite obvious on a Gann monthly geometrical chart.

The dark clouds of fear and pessimism were clearly visible on the horizon.

The bull had run an eleven month 1000 point gain and was clearly exhausted.

Markets take longer periods of time to rise because of periods of profit taking. But, markets also fall very swiftly because of the fear of losses.

With this philosophy in mind, the stock market on a Gann monthly chart looked quite ominous indeed.

With the 32 X 1 monthly angle at 2710 and the 16 X 1 monthly angle at 1745, it didn't take a Ph.D. in mathematics to see a 1000 point spread between these two 5 year old aging angles.

It only took two months for the Dow to lose 1000 points. On the close of Black Monday, October 18, 1987, the Dow closed at 1738. On this same day the 16 X 1 monthly angle closed at 1773.

Once again, Gann rules tell us to expect a change of trend when price penetrates an angle.

This is exactly what happened in October, 1987. A new change of trend to the upside was in it's infancy. The mightiest bull of all time refused to succumb. The 16 X 1 angle had completely re-energized the lost momentum, and the bull was ready for another run.

To determine the next major change of trend in the Dow, we must examine and study the Gann monthly chart.

The knowledge of this information proved to be fruitful in January, 1990. On January 12, 1990, this chart began it's 90th month of existence.

This is 5/8ths of the square of 144 months (12 X 12) and 1/4th of the cycle of 360 months.

At this point, it must be understood that it is not necessarily time that causes major market crashes, but the distance between major angles at important points in time.

The 16 X 1 monthly angle from the August 12, 1982 low stood at 2217 on February 12, 1990. The 32 X 1 monthly angle stood at 3657 on this same date.

Since the Dow was not penetrating 3657 in price in this time frame, it did not qualify as having market crash potential, as the D^ow closed at it ' s all time high on January 2, 1990 at 2810.

The Dow had run into resistance hitting the angle, gaining 4 points per month from the August 25, 1987 high at 2722. This angle was closing at 2834 in this time frame. The Dow had also gained 1080 points from the Black Monday low of 1738. This 1080 number is a perfect harmonic of 90 months. This 1080 number is 360 X 3. Also, just as the square, of 52 X 52 equals 2704, stopped the bull in it's tracks in August, 1987.

The square of 53 X 53 equals 2809 also stopped the forward thrust in January, 1990.

The time clock of 90 months changed the trend of the Dow and it quickly lost 270 points in January. This 270 points is 3/4ths of the circle of 360.

The Dow found support at the 2540 level and had gained back it's support at the 2577 level. This level is very important support utilizing Gann's natural squares in price.

By adding 1800 to the bear market low of 777, we receive the number 2577. This 1800 point gain is 360 X 5. By adding another 360 points, we find the next resistance level at 2937 on the Dow.

What do the Gann monthly geometrical angles tell us about support on the downside for 1990?

The 16 X 1 gravity center of the current long term bull market closes at 2297 on July 12, and at 2313 on August 12. On August 12, this angle will be 96 months old. This is 2/3rds of 144 months.

I also like to keep up monthly angles on the Black Monday lows, and this particular angle of 16 X 1 closes at 2282 on August 12th.

The 32 X 1 monthly angle from the October 19, 1987 low has supported countless market rallies since October, 1987.

This angle is worth watching the first half of 1990 for support or resistance. It closed at 2602 on January 19th and 2634 on February 19th. This angle will close at 2890 on October 19, 1990. This is 36 months and 1/4th of the square of 144 months from the Black Monday low. Also, 2880 is 360 X 8 and the square of 54 X 54 equals 2917. And, as mentioned earlier, 2937 is 360 X 6 plus 777.

Remember, October was reckless in 1987 and 1989. Annual cycles tend to repeat themselves.

But, if the Dow falls into the 2300 area this year, it could offer strong support.

Any closes by the Dow Jones Industrial Average below the 16 X 1 gravity center from the August 12, 1982 low and the 16 X 1 angle from the Black Monday low for three months in a row, it's over and the fat lady has sung.

We will most definitely be in a bear market with this kind of technical breakdown.

If and when this scenario appears on your chart work, please be aware of bear traps. On August 12, 1990, the support level from the August 12, 1982 low stands at 1545. Climbing a paltry 8 points per month.

That is only two Dow points per week folks. The October 19, 1987 8 X 1 angle will stand at 2026 on October 19, 1990.

Look for bear market rallies to the 16 X 1 angles. Any consecutive closes, on the monthly charts below the 8 X 1 monthly angle from October 19, 1987, could invite a market crash.

Let's watch the market unfold in the months ahead.

But look, it's still February with the Dow in the 2600 range, and only 200 points from it's all time high. Right! Hey, want to buy my seat on the N.Y.S.E.?Do you have a seat on a plane to Rio? I'll trade you even.

Just kidding.

Another geometrical tool, to help you identify market momentum and the trend, is to study the monthly geometrical angles falling from the January 2, 1990 high. This helps you see with confidence on your monthly chart the current situation clearly.

Let's take 90 days from the top, as this is an important time window. This brings us to April 2, 1990.

The monthly angle falling at 32 points a month stands at 2714, 64 points a month at 2618 and 128 points per month at 2426.

If the Dow is about 2714 in this time period, look for new highs . If the Dow is sitting above 2618, it's much stronger technically than it was in February. But, if the Dow is in the low 2400 range in this time domain, the bull market could be on the edge of a cardiac arrest.

Moving on to another time window, for changes of trend, brings us to early June. This time window is 22-1/2 weeks from the January 2nd high.

The monthly angles falling from the high at this point include 128 X 1 equals 2170, 64 X 1 equals 2490, and 32 X 1 equals 2650. If the Dow is trading between 2170 and 2490 and especially below 2250, the trend is very bearish. However, if the Dow is trading between 2490 and 2650, this kind of consolidation could be medicinal and we could see new highs.

If the Dowis any higher in this time frame, all bets are off and look for new highs.

And finally, moving these angles to mid-year brings us to July 1, 1990. This time period is 180 days from the January high. Gann rules tell us to expect a low 180 days from a high or ideally 182 calendar days from a high.

However, we must always remain aware of psychological inversions, which means where we expect a low, we instead reach a high. All impending inversions can be rectified by Gann geometry in advance.

Picking out the trend in this time window using the angles falling from January 2, 1990, tell us that the angle of 128 X 1 stands at 2042, 64 X 1 at 2426, 32 X 1 at 2618, and 16 X 1 at 2714.

Once again, any consistent Dow closes below 2200 and the trend is very bearish. Any lows in this time frame above 2600 invites new highs on the Dow.

I'd also watch this time period in terms of the calendar day range between the August 25, 1987 high at 2722 and the Black Monday low on October 19, 1987 at 1738. The point spread here between these two numbers is 984. Turning price into calendar days and counting forward from October 19, 1987, brings us to June 29, 1990. Ranges between highs and lows reaching ending points can produce sharp changes of trend, depending on the geometry in force at the time window.

One of the most useful and dependable ways to determine current support levels is to analyze midpoints.

To determine midpoints on the Dow, you simply combine different highs and lows depending on the time frame you're interested in. If you're interested in a long term perspective, you take the current all time high on the Dow and subtract the bear market low from this high. You then divide the difference by 4 and add back the low to each of the four levels of interest.

By taking the 1990 high at 2810 and the bear market low at 777 and working the above formula, we find support at 2301, 1793, 1285, and of course 777.

The next midpoint numbers of interest would be to take 2810 and the Black Monday low at 1738. Here we find support at 2542, 2274, 2006, and 1738.

Notice that the 2542 midpoint number stopped the Dow slide in January, 1990 at 2543.

To give you an ultimate example of the reliability of midpoints, let's take the Dow high of 2722 and the bear market low at 777. The halfway point between these two numbers is 1749.

On Black Monday, the Dow closed at 1738. The next day, the Dow closed at 1841, never closing below 1749 again.

Taking the most current midpoints between the January high and low can be useful for short term traders. This point would point to more consolidation in price.

Let's touch on the square of nine and see what it tells us in price. The Dow closed at 2810 on January 2nd. The number 2809 is on the 315 degree angle of the square of nine in cycle

The Dow fell completely out of cycle 26 and moved 360 degrees to 2601 in cycle 25. It then made a closing low at 2543. Resistance on the upside will be found at 2917 on the 135 degree angle and 3025 on the 315 degree angle in cycle 27.

Support on the downside is 2501 on the 135 degree angle, 2401 on the 315 degree angle and 2305 on the 135 degree angle in cycle 24. A general rule to follow is that markets move 360 degrees with the trend, and 180 degrees against the trend in the square of nine. All numbers on the 135 degree angle are even squares, and all numbers on the 315 degree angle are odd squares.

Therefore, these two angles in particular offer the greatest support on resistance in market movement. In fact, it's important to watch all four of the fixed angles including those numbers found on the 45 degree, and 225 degree angles of the square of nine.

In another article, I explained how calendar days could be used as numbers in the square of nine to predict market trends. The Dow topped out exactly 2700 days from the August 12, 1982 low. We find the number 2705 on the 135 degree angle of the square of nine.

Therefore, the Dow made a top five days before this number on the 135 degree angle of the square of nine in cycle 26. In the previous cycle, the Dow reached a high on June 12, 1989 at 2496 days from the August 12, 1982 low. This was also 5 days before 2501 where we find the 135 degree angle. In cycle 25, the Dow hit a short term low at 2659 at exactly 2601 days from the August 12, 1982 low on the 315 degree angle. Therefore, cycle 26 should unfold in the same pattern as cycle 25. So far, so good, as the Dow did reach another high at the 135 degree angle of cycle 26. Therefore, we should expect another low at the 315 degree angle in this same cycle. This brings us up to April 21, 1990, where we find the number 2809, April 21st is a Saturday, so let's watch Friday the 20th, and Monday the 23rd.

Beware of psychological inversions, this low could be a top. If the Dowis at 2809 at the same time 2809 calendar

The high at 2810 and the low at 2543 gives us 2543, 2609, 2676, and 2743. By studying daily closes on the Dow in relationship to these numbers, will open your eyes to the validity of midpoints for levels of support and resistance. An example would be to watch for a break-out on the Dow above 2676, the halfway point from the high and the low. Days have expired, bring out the fireworks.

By the way, 2700 days is of major importance in terms of calendar days. As I said earlier, the Dow topped out at precisely 2700 days from the bear market low on August 12, 1982. The ultimate cycle number is the square of 90. This is 8100, and 2700 is one-third of 8100. And what else is so cool about 2700 days? Hey, that equals 64,800 hours of time, yea go on. Well 64,800 divided by 2 equals 32,400. This number 32,400 is 4 times the square of 90.

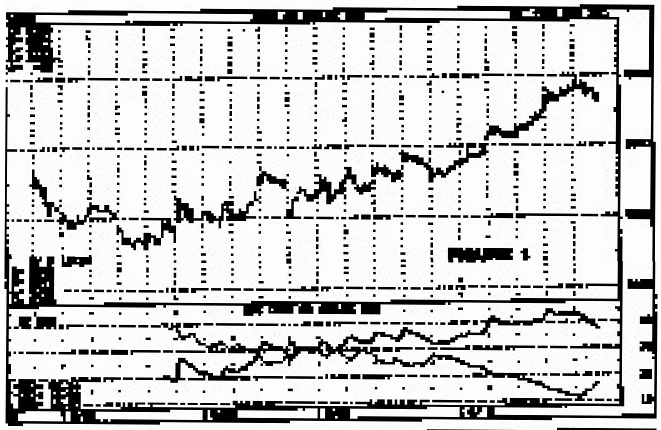
Thus, 8100 hours completes one total cycle in time. Four times this number completes 32,400 hours of time, which completes 360 degrees in time.

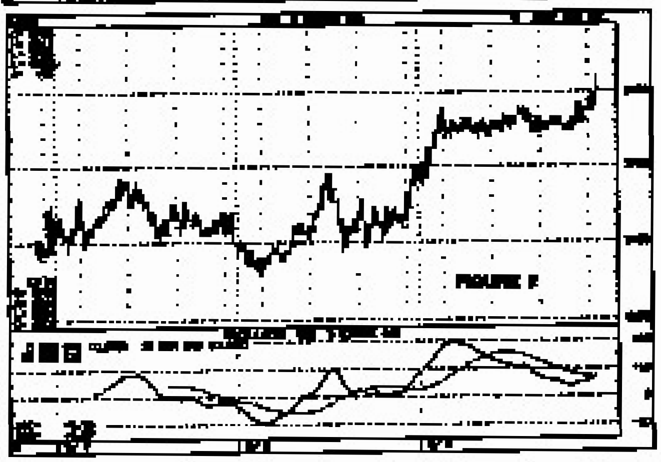
Another way of looking at this pure number analysis is that 64,800 equals 360 hours of time, 180 times. Well what has our analysis told us about crucial support levels for 1990? Hell, I don't know, I'm totally confused now. Well, let's give it our best shot anyway.

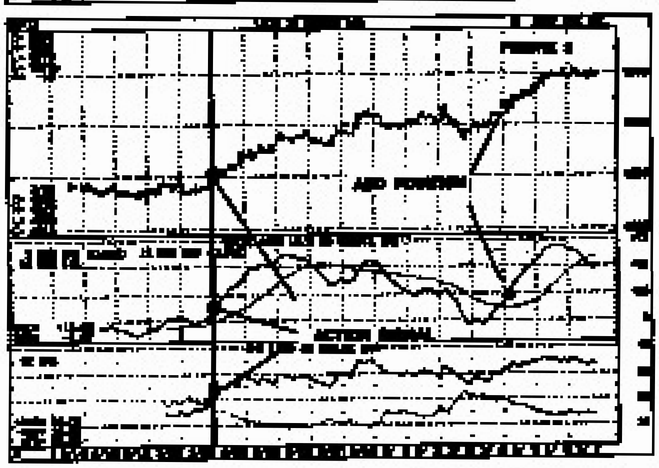
Our Gann monthly geometry, square of nine analysis, and midpoint interpretation all point to strong support on the Dow in the 2300 level. Any breakdown at this level will surely invite a bear market.

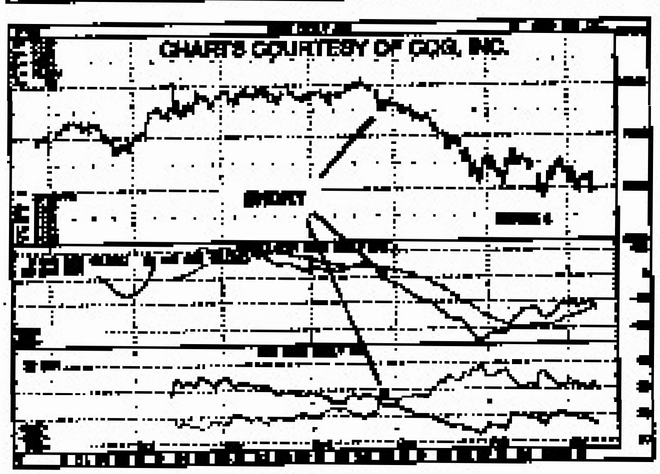
Upside momentum in the Dow invites resistance in the 2900 to 3050 range. Any movement in the Dow at these levels should be construed as very bullish. The bottom picking dates for the first 6 months of 1990 are the end of March or first of April. The first week of June and the end of June. Also mid April will be interesting since it is 6 months from the enormous peak and valley that took place between October 9th, and October 13, 1989. But once again, watch those inversions as any of these time windows could produce a high instead of a low. By the way, I have been graciously promoted to staff writer of this wonderful magazine. I look forward to serving you the reader through several 360 degree cycles.

Chris Kakasuleff is completing a stock market course and can be reached for private consultation at 1-317-872-7174 or 8213 Plaza Ln. Indianapolis, IN 46268. Chris also is accepting clients who are interested in profit projections in their own business utilizing Gann analysis.






ADD POSITION
ACTION SIGNAL


CHARTS COURTESY OF CQG, INC.
SHORT

Techniques in Technicals

By Terry R. Davis

Sooner or later in every trader's career he/she runs into a Book or chart service with technical indicators on the charts. By these I mean RSI, ADX or moving averages. This is by no means a complete list. Anyone leafing thru this magazine is overwhelmed by what is available. The standards of yesterday have given way to more and more of less and less! Does anyone use any of these technicals in their trading? Good question, huh? On my quote system (CQG) I have an outstanding array of many of the bells and whistles (or is it dogs and ponies). Are there any of these so called indicators that work? For my money and many of the people I talk to....the resounding answer is almost always NO!

The field of technical indicators was broken wide open by Welles Wilder in his 1978 book, "NEW CONCEPTS IN TECHNICAL TRADING SYSTEMS." This book is excellent and if you don't use anything in it. It is still a gem! From that time forward the field of "Technical Trading Methods" has moved forward at an alarming (?) rate. We are all bombarded thru magazines, mail, TV and the phone for the latest whiz bang method. Do any of them work? Some do and sadly to say most don't. Follow ups on many of the "black-box" $3,000 systems promoted in the early 80's find many things lacking...notably profits. One such system which promised 75% correct trading in actuality produced 80 So losses. It was wrong so much of the time that one system owner reportedly started taking the opposite position instead of the one signalled. Then it was 80% correct! How are we to know what to do?

Different indicators suit different personalities. That may mean that stochastics work well for some but poorly for others. The same could be said for any indicator. Trading is a very individual thing. What I like you may despise. Reminds me of lima beans or worse yet brussel sprouts... how do people eat those things ....yuck! If you are like most people you will search and search for something that fits your personality. I know I did. Then the back testing begins. Where in the world can I get the information I need to test the "system". Thankfully, the information is now readily available and with a personal computer almost anything can be tested relatively quickly and easily.

Your individual makeup is what makes you a winner or a loser in the markets...or for that matter life. Since I am a system's developer myself I spend a great deal of time on the phone talking to people about trading in general. The thing that I hear over and over is the lack of planning on what people (should) expect from a trading method. There are many good methods out there that will make money....but do they? Why not? They just don't fit your individual makeup....what makes you tick as a trader. This is not a criticism of you as a trader..just a fact of human nature. Most people, myself included, have been around long enough so that we have read many things and are influenced by them to a greater or lesser degree. You must continue searching, on your own, for the method that makes you feel comfortable in the market place.

This applies whether it is my market structure method or one of the other fine methods on the market. BUT when you find something that works for you and fits your personality discard EVERYTHING else. Larry Williams in his book, "The Definitive Guide to Futures Trading, Vol

II", says after you find something that works for you the closer you can come to acting like a computer with the trading of the method the better off you are. Too many people find that after they are introduced to successful concepts they keep wanting to fall back on old habits. Folks, that won't work with any method !

I am going to show you a couple of indicators that I have found to be relatively reliable on any time frame chart...whether 1 min. or daily. These are purely price related and have very little to do with the driving forces of the market... NATURAL LAW! Now that I have given you that caveat let the games begin. One final drift away from the subject and then we will proceed. The information I am going to give you is free but it has great value. Sometimes we do indeed look "a gift horse in the mouth."

We are going to use two different technical indicators to confirm a buy or a sell. One is a short-term and one is a medium term. When they are in agreement you will have few whip-saws in the market. I am not going to tell you how to set stops. You ARE using stops, aren't you? On the daily charts these indicators will keep you in for a good deal of the move. On 30 minute charts they are also very effective and keep you in the market for most of a short-term move. They will work on any commodity. Please if you use this method or any other trade more than one unrelated market. You MUST have some diversity in what you trade. If you are in the farm related industry don't trade just agricultural products. The same holds true for the financials. Mix them up! If you don't I doubt very seriously if it is possible for you to be successful. If your account is not big enough to trade more than one market you shouldn't be trading anyway. Is that blunt enough?

Our medium term indicator is Welles Wilder's Directional Movement Index. I am not going to go into the construction of it here. You will have to look it up in his book to see how to construct it but it is basically a crossover method. (As an added bonus to this article if you will trade his directional movement method in the swiss franc market exactly as it appears in his book you will do very well). His book details using 14 as the number of bars in the formula. I have found that 32 is much better for this method. Please see figure 1 for an example! Also if the charts shown are by CQG!

Our short term indicator is an oscillator. An oscillator is defined as the difference between two moving averages. The two we are using are the 5 and the 15 bar moving averages. This is our oscillator. We are also going to plot the 20 bar moving average of the oscillator itself. This also give us two lines for crossovers. See figure 2 for an example!

Each technique is moderately successful by itself! It is the combination of the two that gives a valid signal. You wait until both different indicators give the same signal (cross) at roughly the same time and you take whichever (long or short) signal is generated. See figure 3 for an example. You stay with the trade as long as the DMI is still signalling long or short. This is basically a buy and hold (or sell and hold) strategy. You can pyramid as the short-term oscillator turns back in the direction of the DMI. See figure 3 again. Since we have only seen intraday up to this point let's take a look at a daily. See figure 4.

Try this method and see if it suits your trading style.

Mr. Davis is a small business owner and author of the acclaimed "Market Structure" course. He can be reached at IL watts 800-323-4616 or USA watts 800-225-7642 or 21 7-347-5101.

Historical Data Research: Veracity of the 100 Year Cycle

By Robert Flower

The famous Wall Street Prophet of the first half of the twentieth century W. D. Gann often said that major cycles were found in 100 and 500 year time periods. Following Gann's lead, research was initiated to determine the feasibility of this concept and to attempt a peek into what the 1990's may have in store. The following information is documented historical data based on that research.

The best place to start would be the most obvious, the Civil War of the 1860's, in which many Americans lost their lives as well as our nation being torn apart. In the 1960's we period of great civil strife and were involved in a very unpopular war which cost many American lives. In 1896, there was a great deal of city conflict which had its origins in religious and nationalistic premises. There was a great challenge to "The control of urban institutions by these nationalists". This is very much akin to the movement of the Afro-American today. There was a great move to reform, especially in politics and particularly in the area of corruption and mismanagement.

Moreover, in the 1880's and 90's there was a concentration of Wall Street manipulators and plungers which over capitalized railroads and dissembled them by selling off their various assets. These individuals were known as Captains of Industry. There were two depressions to speak of during that time. The first lasted from 1873 to 1879, which is very renascent of our recession of the 1970's era. The second was 1893 to 1896. During this period prices were reduced but there were higher wages. From the period 1878 to 1896, wholesale prices declined by as much as 25%. This was due to a drop in gold production stemming from a lack of interest in same and the contraction of government expenditures. It's ironic that these latter two are exactly what has been shaping up over the past several years. (Gramm-Rudman Act) Another factor which caused a sharp drop in costs stemmed from new technology and superior management. Again, events indicative of modern times.

In addition, during that time, there were huge bank failures as well as numerous small business bankruptcies - not unlike the events of the 1980's. There was also heavy unemployment (1970's), wage cutting (1980's) and labor unrest (1990's?). There were great transportation strikes in 1893 to 1894. During this period of time, businesses absorbed competition; buyouts and mergers were commonplace. In 1879, the gold standard was reinstated. As you may well remember in 1979 gold soared to record heights. In 1873, silver money was terminated as the commercial value was greater than the denominational value. If you remember in 1964, silver coining was also stopped and in 1979 people were melting coins for their silver value.

During this period of time social patterns exhibited inequities and deranged values as well as the abandonment of old fashioned values. The population was driven towards a heightened hunt for wealth. There was a substantial rise of obscure people who were vulgar and ostentatious in their lifestyles - "Dallas" anyone? Still, many people lived in poverty - our homeless of today. At that time Americans built houses with mansard roofs, and castle like dwellings (Tudor types) were popular just as today. Further, there was much new housing developed at that time. There were outbreaks of contagious and infectious diseases to a large degree. (Aids)

People listened to papers on poets, especially those of Greece and Ancient Rome. There was great innovation in finance, (todays unstable and shared mortgages, Junk Bonds, etc.) and transportation and there were great philosophical accomplishments. It was indeed an era of change.

At the turn of the century, there was a move towards "Progressivism". This was the traditional promise of American life something indicative of the Ronald Reagan era. People feared repression by corporations in their rise in status and prestige. They sort to restore equality of opportunity and social justice. There was an expose of the Standard Oil Co. the Alaskan oil spill?

Concerning foreign affairs, at that time there was a great conflict with Panama.

There were interventions into Haiti-, Dominican Republic and Nicaragua. This paralleled our limited intervention over the past several years, into Haiti, Granada and Nicaragua. It was also curious that the American president backed insurrectionists in Nicaragua and Panama due to leadership refusal to abide by American wishes. In 1895, there was also a war in Cuba brought about by foreign intervention (Russia and the missile crisis). In 1899, the United States employed an Open Door policy with foreign nations. During this time China's power declined leading to area instability. Japan made great growth into the modern era; not unlike Japan's industrial action and commerce of the 1970's and 80's.

The most interesting factors that may give us a clue to the 1990's developed in 1890 and in 1791, in the area of the American economy. In 1791, the first United States bank was established by Thomas Jefferson. With this bold stroke government credit was revived. . In 1890, the Sherman Silver Purchase Act was established. At this time the government purchased silver mines and silver supplies. There were treasury certificates issued against the silver. Gold and silver achieved equal parity although the ratio was 20 to 1. This helped in bringing about economic credibility to the government at that time. However, in 1893, the Silver Act was abolished and the depression of 1893 to 1896 ensued. In fact, silver was the basis of the 1896 democratic convention. William Jennings Bryan, the democratic presidential candidate and his famous Cross of Silver speech made history. The basis was return backing. --Maybe? Consider that even if gold doubled in value, it still would not eliminate our national debt. But, if gold went to $1,000 per oz and silver went to 15 - 1 ratio, it (silver) would still only be at $66 per oz.

The good news of the times was that there was great innovations and many new discoveries. In 1897, business improved, prices rose, more gold was discovered and there was substantially better bank credit. By 1900 the Currency Act was legislated and there was a return to the gold standard.

Unfortunately, we in America being such a young country have child says "What is the sense in studying history"?, Perhaps you can show them this article or a similar one to it.—

Robert Flower, The Gilchrist Institute for Cognitive Science Inc., 127 Warwick Rd. Bronxville, NY10708. (914) 423-1331

The Wind of Change in Foreign Exchange

By Adam Hewison

One of the oldest and most widely followed foreign exchange ~ cross-rates is the Swiss franc / Deutsche mark cross. The reason for this is that Germany and Switzerland share at common border and are each other's major trading partner. Because of the two nations' close trading relationship, the cross-rate between the two is actually more important to their separate economies than what happens to the U.S. dollar. It really does not matter so much to them if the U.S.dollar is going up or down as long as the cross rate bet Keen the two countries is stable. That stability lasted for most of the nineteen eighties (see Figure I) as the cross-rate between the two countries traded in a narrow band between .8000 and .8600.(it takes .8600 of a Swiss franc to buy one D.mark.) That all changed in March of 1989. It was then that the D.mark moved over the .8600 level for the first time since 1981! That level had previously acted as resistance for eight years. All of this took place months before the winds of political change started blowing across eastern Europe.

Back to the Future

Going back to the early seventies the D. Mark enjoyed a twenty percent premium over its Swiss neighbor. That was all to change as the decade of the seventies drew to a close. During that time the Swiss franc had become the number one currency in the world, gaining 135 percent against the U.S. dollar and 46 percent against the Japanese yen.. The twenty percent premium the Deutsche mark once enjoyed over the Swiss franc rapidly diminished as the decade drew to a close. When the eighties arrived, the DMark was only a shadow of its former self as it was at a twenty percent discount to the Swiss franc!

Forward to the Future

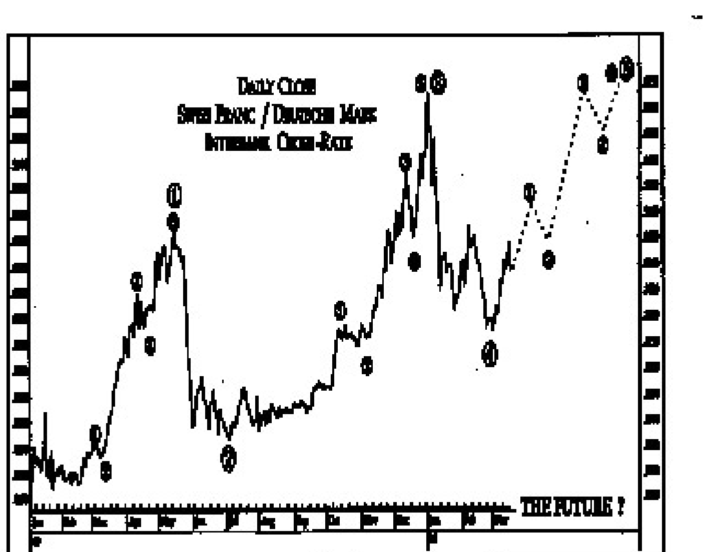
It would appear that with the winds of political change in the air, economic change is fast becoming a reality in eastern Europe and in the Swiss franc / D mark cross. The Swiss franc, once the strongest currency in the world, is fast losing ground and status to the DMark. Let's examine Figure (2) to see just what has happened since the beginning of 1989 to the Swiss franc / D.mark cross-rate. As you can see in January the cross-rate challenged its historic resistance level at .8600 but quickly retreated back to .8500. March was another story as the D.mark soared over that level of resistance in a series of five waves. After the cross reached .8960 and completed the fifth wave of it's first leg, it dropped sharply back to its previous historical level of resistance at .8600 That area, which had acted as resistance previously, reversed roles and acted as a level of support. The set-back created the key counter trend second wave (more about this later) which goes counter to the primary trend. After about four months of trading between .8600 and .8670, the market finally sprang to life in October as it proceeded on its third and longest leg. A series of five waves carried the D.mark up to its best levels against the Swiss franc since 1980. On the first trading day of 1990 the Swiss Franc / D.mark cross closed out at .9233 in late New York spot trading. The four month advance completed wave five of the third primary wave. It was like deja-vu (all over again) as the cross-rate repeated its act of the previous year as wave five of the third leg was put into place. The sharp downward correction represented a 62 percent retracement of the January 1990 high and the 1989 July low. This is a perfectly normal set back for any bull market. However the setback should hold at present levels and not move much lower to be considered a valid wave four.

Beyond the Future

Predicting the future is what a lot of economists try to do, but few seem to get it right. I am not an economist but a trader, I am going to stick my neck out and predict that the Swiss franc / DMark cross-rate will trade at par some time in the next few years. Until that time I believe that the wave four correction that is currently underway has a eighty percent chance of holding. The next upward leg in this cross-rate will represent the final fifth wave up in this current bull market. I believe that this wave will take the cross- rate to the .9500/.9600 level and offer some great trading profits. As always in speculative trading situations, flexibility is the key. Remember the old trading adage "when in doubt, get out". It remains to be seen what the future hold's for the Swiss franc / DMark cross; only time will tell. The odds would favor the DMark continuing to improve against the Swiss franc, and when you trade with the odds in your favor your chances of success in the marketplace increase dramatically.

Conclusion

All references to the Swiss franc / DMark cross-rate are quoted in interbank terms. As the interbank market represents ninety-three percent of the world's foreign exchange activity and has a daily average volume of over 500 billion dollars it is the one to follow. The waves or legs shown on Figure 2 are my interpretations of R.N. Elliott's brilliant stock market observations. Elliott made his discovery about wave action in the early thirties. The Elliott theory is that



a market moves either up or down in a series of five waves or legs. There are three waves that go in the direction of the major trend and two waves that go counter to the trend. As far as I am aware, this is the first time that this theory has been applied to true cross-rate trading. One prediction that I can make about foreign exchange with complete confidence, knowing it will carry a 100 percent accuracy rating is this, "rates will fluctuate". Good luck trading and watch the cross-rates. \

Adam Hewison is president of The Rich Financial Group, Inc. 4716 Chesapeake Avenue, Shady Side, MD 20764 (301) 867-RICH The group specializes in foreign exchange trading in both the futures and interbank markets. Adam has just completed a major reference and trading book on foreign exchange; in it he covers all the major currencies against the U.S.Dollar beginning in 1972, as well as never before seen cross-rate charts Of particular note to market technicians and traders, every trading year since 1972 has been technically analyzed for all the major currencies; and for the first time he shows his key indicators and how they work. The book is entitled "RIGHT ON THE MONEY; THE DEFINITIVE GUIDE TO FORECASTING FOREIGN EXCHANGE RATES" and is available from The Rich Financial Group, Inc. The group also publishes "RIGHT ON THE MONEY: THE FOREIGN EXCHANGE REPORT", a monthly report devoted to all aspects of foreign exchange trading. Call or write for a free copy; supplies are limited.

The Ultimate High Achieved Synergy at 2800

By Eric Hadik

There are numerous ways to | effectively use, and just as many to flagrantly abuse, the Fibonacci or Golden Ratio. Since a lengthy dissertation on improper utilization of this mathematical phenomenon would serve little purpose, (the P+L column of your account statements will quickly allow you to recognize whether or not you are properly implementing its power and whether or not to seek a better approach) I prefer to concentrate on the benefits, or accentuate the positive utilizations, of this tool.

One of the more useful applications of this ratio is within the structure of the Elliott Wave, particularly when comparing known impulse and/or corrective waves attempting to project a subsequent wave or waves. Several examples of this concept are presented in the two preceding articles of this trilogy* and also in most publications on the Elliott Wave.

Relying on a single indicator or use of that indicator, however, can be fatal so a discussion of some additional applications is warranted to avoid the pitfalls of a narrow-minded trader. One of the simplest, and yet most profound methods for utilizing the Golden Ratio is derived from Gann's principle of calculating the various multiples of significant tops and bottoms as support or resistance for ensuing reversals.

Multiplying the six main derivatives of this ratio (.236, .382, .618, 1.618, 2.618 and 4.236) by each of the predominant wave tops and bottoms throughout the preceding sequence, in this case the fifth Cycle wave, and adding the product to that wave renders congruent levels of resistance with one or two of these levels appearing as the most potent. Conforming to the

August 1982 Low = 777
777 + (2.618 x 777) = 2811
July 1984 Low = 1079
1079 + (1.618 x 1079) = 2825
September 1986 Low = 1733
1733 + (.618 x 1733) = 2804
October 1987 Low Close = 1739
1739 + (.618 x 1739) = 2814
November 1988 Low = 2045
2045 + (.382 x 2045) = 2828

Figure 1

1974 Low = 578
*24^2 = 576
October 1976 High = 1015
*32^2 = 1024
August 1982 Low = 777
*28^2 = 784
January 1984 High = 1290
36^2 = 1296
July 1984 Low = 1079
33^2 = 1089
August 1987 High = 2746
*52^2 = 2704
Ultimate High Resistance = 2804-2828
53^2 = 2809
*Notice that the total of the square roots of the two most significant lows equalled the square root of the 1987 high.

Figure 2

principle of synergy, these levels are most reliable when coinciding wave projections and ratio analyses align, often correlating to Fibonacci Time Projections*.1

The most significant level of resistance in the Dow Jones Industrial Average is also the most concise, encompassing 24 points and ranging from 2804-2828 and some of the evidence is demonstrated in Figure 1.

This level, as originally noted in February 1989, presents an ominous barrier for the DJIA and the likelihood of a penetration through this resistance is relatively small. One final test of 2800 does seem feasible at this point but that would require a 200+ point rally from current levels in the face of what could be a breakdown of the Nikkei Index. (28,000 presents some unique support in this Index coincidentally.)

As mentioned in the previous articles, The Fibonacci Ratio can also be applied to cycles and wave longevity to develop time frames when major reversals are probable.

It is even more uncanny when other analyses are applied and produce a similar conclusion. Hamilton Bolton, a protege of R.N. Elliott and later A.J. Frost, pioneered the concept of squaring whole numbers as key levels in the market.

Each of the highs and lows in the Fifth Cycle Wave have occurred at or very near a squared whole number penetrating these levels only on an intraday or theoretical basis.

Incidentally, 2808 is a number, only the fifth up to this point which divides evenly by 9, 12 and 52. (These numbers may ring a bell to Gann students.)

The strongest argument for a top at 2800, though, is derived from the most credible sources- the works of W.D. Gann and to an even greater extent- The Holy Bible.

In W.D. Gann's 45 Years In Wall Street several guidelines are presented for calculating the normal time and magnitude for impulse and corrective sequences and accepted levels of support and resistance surrounding previous highs and lows.

In Gann's lifetime, the highest that the Dow had advanced was 386.1. or just shy of 400, and I have used the assumption that this natural level of resistance (natural because it was 1000% of the major lows at 40.56) represents the first multiple for each of his rules and the first full cycle of market action. As the market exceeded this region in the ensuing years and began accelerating in arithmetic terms, Gann's guidelines should be adjusted proportionately to compensate for the associated stock market prices.

This theory will be the topic for future articles but, presently, it is important to notice that 40 and 400 were the most critical levels in the stock market through most of Gann's life. When the market finally surpassed 400 in late

1954/early 1955 it never retested this level, let alone penetrating it, further reinforcing its significance. (It is interesting to note that Bob Prechter's long-term Elliott Wave Forecast calls for a return to 400.) 2800 represents the 7th cycle of market action (or the 70th since the major low at 40) and any Biblical student, or student of life for that matter, should recognize 7 as being the symbol of completion.

All throughout the Bible, one of Gann's most important guides, the number 7 (and 70) is used to represent culmination, the most noteworthy and predominant examples in Revelation, the final book of the Bible. (Anyone wishing to learn more about this principle, the power of 7, should obtain Rocky Freeman's The Amazing Sevens and/or James P. Dawson's I AM from 405-348-3410.)

When the end times are prophesied in Revelation, the final judgments come in the form of four sevens (coincidentally?) which encompass the seven year tribulation and reign of the Antichrist and culminate the prophetic seventieth week of Daniel. The fourth seven, the final and ultimate culmination and termination of the Gentile world power, is an angel declaring "It Is Finished". (A unique parallel to the foremost barometer of American economic power--the DJIA)

Reviewing recent action in the Dow Jones, we find that the final rally (fifth Primary wave) into January 3, 1990 commenced at 1616 on October 20, 1987, lasting almost exactly 3-400 pt. cycles. (3 is the other Biblical symbol for completion, particularly when viewing the Trinity.) This high occurred 28 months, and 1 week, after the August 1987 highs and currently I am expecting a 3rd test of 2800 (to mark completion of completion) to occur between April 30-May 4, 1990, ending a 28 week recovery from October 13-16, 1989.

If my calculations are correct, a high should occur on March 21 (28 trading days from the recent highs of February 8/9) making April 30 or May 1, 1990 the next 28 day cycle and the likely time for this final top.

For any lingering skeptics of the significance of 7 and 28, consider: Lunar Cycle = 28 days Biological Cycle (Woman's) = 28 days Human Gestation Period = 280 days (The formation of life) Gestation Period for a Rabbit = 28 days (The basis of the Fibonacci Sequence) Dow Jones Extreme Low = 28.50 (August 8, 1896) ...and the low immediately preceding this unprecedented 7 year rally occurred on August 12, 1982 at 777, just 7 points below the square of 28 at 784. 9

Eric 5. Hadik, 1755 Trinity Ave. Apt. 63, Walnut Creek, CA 94596, (415) 939-1 751

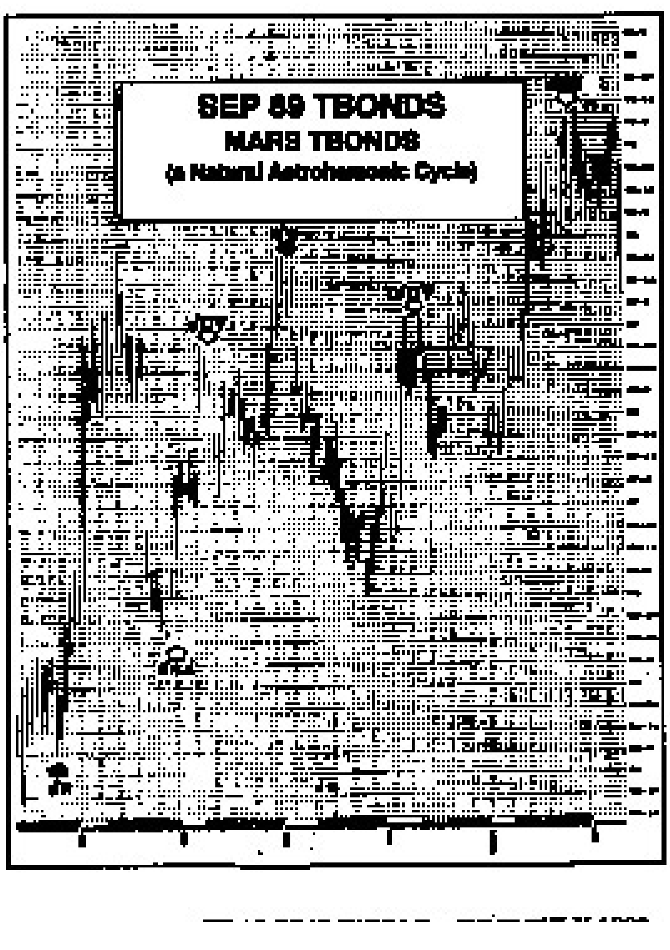
The Astroharmonics of Treasury Bonds and the Planet Mars

BY Larry Pesavento

When I first began researching astroharmonic events to see if there was a correlation between planetary positions and stock market movements, I logically would pick a significant high or low point and proceed to test the thesis. The Venus-Uranus cycle was used because the synodic period (one complete cycle) is 225 days divided by 365 days which equals .618 or the mystical Fibonacci number. In my book "Astro-Cycles - The Trader's Viewpoint, " I expanded Donald Bradley's "Stock Market Prediction" another forty years and found it was as valid as ever.

Treasury bonds were my next project because of the huge volatility and superb liquidity. I assumed that at extreme highs and lows similar astroharmonics would exist. The planet Mars was the answer. Mars is associated with energy and heat. It moves through the 12 Zodiac signs (30 degrees each sign) every 45 days.

Only the major aspects were tested in order to keep the program as simple as possible. Conjunctions (0 degrees), sextiles (60 degrees), squares (90 degrees), trines (120 degrees) and oppositions (180 degrees) were chosen. We asked the computer to give us these dates when



Mars completed these aspects with the outer planets - Jupiter, Saturn, Uranus, Neptune and Pluto. As a trader using these astroharmonic dates, one would expect a significant tradeable trend change to occur near these astroharmonic aspects of Mars to Jupiter, etc. The September 1989 T-bond chart illustrates several of the aspects. The smaller aspects of the inner planets were omitted because the chart would have appeared too cluttered.

The retrograde and direct motion of Mars should also be watched closely. Mars moves slowly in relation to Mercury and Venus, so it is not wise to expect a trend change on the day of Mars going direct or retrograde. I particularly like to use a pattern recognition system to signify that the energy of Mars is in effect. In this particular case, it is "breakaway gap" as Mars changes motion.

Our thanks to Bill meridian at Cycles Research and Rob Hand at Astrolabe for developing the program to test these ideas. Several years down the road, financial astrologers will be getting more than their equal time with other technical traders.

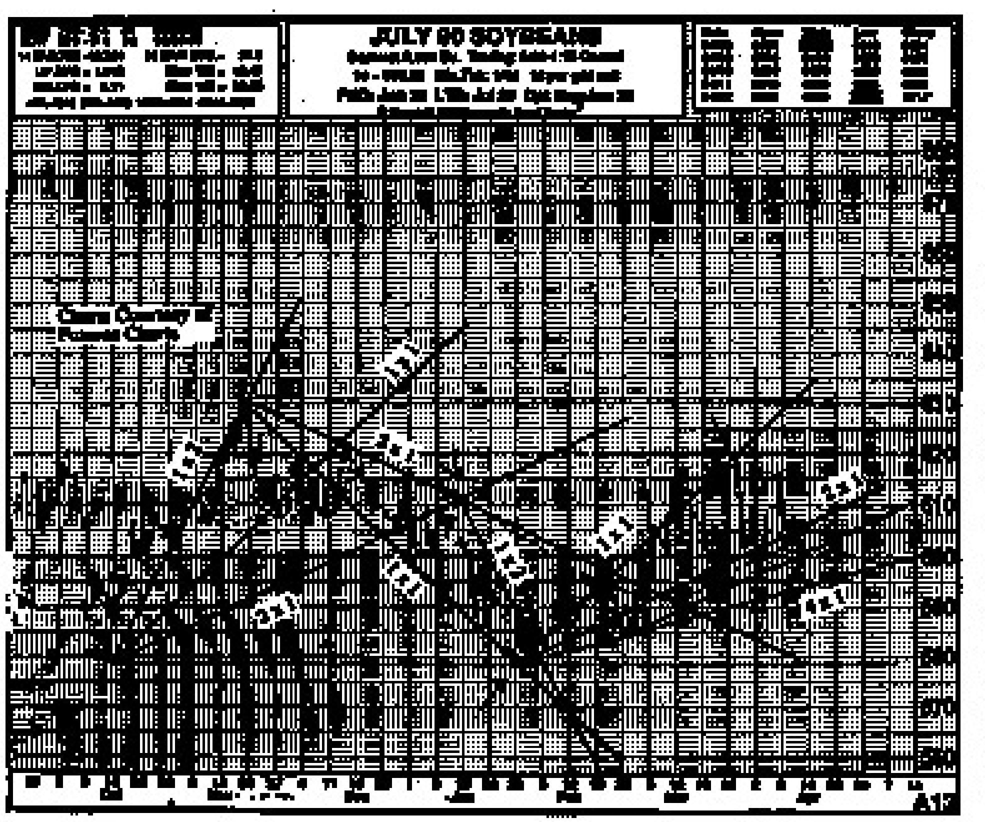
Larry Pesavento, Astro-Cycles, 1421 Price Street, Pismo Beach, California 93449 (805)773-0412

The Use and Abuse of Geometric Angle Lines Part 1

By Robert Miner

One of the many unique time/price relationships that W. D. Gann discovered was the relationship of time and price in the ratios that are derived from the diagonals and divisions of a square. It is easy to understand how these Gann or geometric angles are derived, but not as easy to use them properly for making trading decisions. Many amateur educators just regurgitate some of Gann's pronouncements concerning angles without having proven out for themselves how and when to consider the angles importance and how to use them to make profitable trading decisions.

This article will be part one of two parts relating to what I have found to be the most profitable use of the geometric angles. I have found that some of Gann's "rules" relative to angles do not accurately relate to market activity and would result in very bad trading decisions or significant losses if applied to actual market activity. I will relate to you a few



of my rules related to the geometric angles that are derived from my own research and trading experience and described in my course, THE W. D. GANN TRADING TECHNIQUES HOME STUDY COURSE.

Firstly, I will briefly describe what the angles are and how they are derived. The angles may be expressed as a certain degree of arc or as a relationship or ratio of time to price. An important angle is the diagonal of a square. This is a 45 or 1 x 1 angle. 1 x 1 represents a line where any point on the line is an equal number of horizontal units by an equal number of vertical units. In the case of a price chart for a commodity or stock, the horizontal axis is the time axis and the vertical axis is the price axis. A 1 x 1 or 45 angle would represent an advance of one unit of time by one unit of price.

A 2 x 1 or 261/4 angle is the diagonal line of a square that runs to the mid-point of the opposite side. A 2 x 1 angle on a price chart represents two units of time by one unit of price. A 1 x 2 angle represents one unit of time by one unit of price and is a 633/4 angle.There are also lx4, 4x l, 1x8 and 8x1.

Ideally, a chart is scaled at one price unit per time unit. This is sometimes not practical due to the volatility and wide range price activity of a market. For the relationship of the angles to maintain themselves, the chart scale must be in a doubling series from one price unit. For example, as long as soybeans are scaled at 1, 2, 4, 8, etc. per time unit, the relationship between the angles will remain. A 1 x 1 angle on a 1 per day scale will have the same relationship to price as a 2 x 1 angle on a 2 per day scale. The relationship of a 1 x 1 and 2 x 1 angle on a 1 per day scale will have the same relationship as a 2 x 1 and 4 x 1 angle on a 2 per day scale.

The value of these geometric angle lines is that they can be projected from a single point of time and price. A trendline can only be constructed once at least two highs or two lows have occurred. The geometric angle lines are therefore much more valuable for projecting in advance where price support or resistance might be found.

Let's take a look at a recent example with July soybeans and see how the angles would have contributed valuable information to help a trader make profitable decisions. You must keep in mind that angles by themselves must never used to make a trading decision. The price activity relative to the geometric angles is just one of the important PRICE FACTORS or price relationships that are used to make a trading decision. Unfortunately, many people have promoted angles as a trading technique rather than just one important piece of information used to make a trading decision.

We will look at the market activity of soybeans for this period primarily out of context of the TIME FACTORS and other PRICE relationships in order to understand how to best use the angles in our trading decision making process. We must keep in mind that our TIME, PRICE and PASTERN analysis, no matter how accurate, is of no use if we do not have a trading plan and trading strategies to take advantage of our analysis. In other words, we must know HOW TO TRADE. Unfortunately, the many people giving workshops and producing software trading programs are obviously not experienced or successful traders. We can only find our understanding of market activity worthwhile, if we can put it to profitable use with low risk and low capital exposure trading strategies.

We'll begin with the top of Nov. 16. Let's assume that our TIME, PRICE and PATTERN analysis indicated the Nov. 16 high was likely an intermediate term top and a correction to the Oct. 16-Nov. 16 rally of 4-7 weeks and 40-50% or more in price was likely to unfold.

The wide range down day of Nov. 20 with a close at the bottom of the daily range was the initial confirmation that Nov. 16 was most likely at least a minor top from where a decline would ensue that would most likely correct 40-50% or more of the Oct. 16 - Nov. 16 advance.

Let's assume that our TIME, PRICE and PATTERN analysis indicated that a 20-30 cent decline or more was likely from the Nov. 16 top, that we did not have a short position as of the wide range down day of Nov. 20, and we wanted to look for a low risk point of entry to take advantage of this potential decline. Ideally, we look for minor counter trend swings from the main trend to enter and/or add short positions.

Price initially declines 16 in three days. On Nov. 22, price makes a sharp up day giving an indication that the Nov. 21 low may be the first minor low of the decline. We would look for indications of resistance at an angle line. We would be particularly alert if an angle line coincided with an important price retracement level. A 62 % retracement of the first minor decline fell at 6.25. On Fri., Nov. 24, the 1 x 1 angle from the Nov. 16 top also fell at 6.25. Reactions generally do not exceed the 62-67% price retracement level if the trend is to continue. We would want to look very closely at the price activity should it reach the 1 x 1 angle or the 62% retracement zone.

On. Nov. 24, price opened at 6.24, just one cent below the coincidence of the 62% retracement of the prior minor swing and the 1 x 1 angle from the prior swing high. A close above 6.25 would indicate price was likely to continue to rally to new highs. A failure to close above 6.25 on this day would indicate that Nov. 24 was likely the termination of the reaction to the first minor decline from Nov. 16 and that the decline was to continue. A trading strategy would be to go short on an reversal indication Nov. 24, as price was at an important price resistance area.

A reversal day unfolded Nov. 24 with the close near the low of the day. With this short term daily price activity at this important coincidence of price resistance, the decline was likely to continue from this point. The trading strategy would be to go short on a close that indicated reversal, such as occurred this day. Let's say you were not able to be aware of the daily price activity and did not go short on the close on Nov. 24. With a minor top indicated for Nov. 24, we would then look for the next lowest risk opportunity to go short.

The following trading day, Mon., Nov. 27, was a gap down day. If price had opened within the range of the prior day, I would go short at the open. With the wide gap opening, it would be most prudent to wait to sell on another minor reaction against the down trend. Price makes a minor low at the 1 x 1 angle from the Oct. 16 low, has a minor rally and closes below the 1 x 1 angle on Dec. 1.

Gann stated in his original material what he called a "Law of Angles." Gann's "Law of Angles" is this: "Whenever an angle line is exceeded, price will continue to the next angle where at least minor support or resistance will be found." Many so-called Gann experts repeat this law of angles as if it were fact. Those who have taken the time to prove out trading techniques and relationships by the study of past market activity know full well that this so-called "Law of Angles" is absolute nonsense! Price will as often as not either not continue as far as the next angle or will sail through the next angle without hesitation.

One of my proven rules of angles is that "once an angle is exceeded, if price continues to the next angle, support or resistance may be found depending on the other price relationships and the position of the market at the time. Be alert to the TIME, PRICE and PATTERN factors and indications of change as price approaches the next angle." In other words, we do not expect price to continue to the next angle and we must not expect to find support or resistance at the next angle. Instead, we become alert to the other price relationships at the angles and to indications of change should price reach the next angle.

From the Dec. 4 minor low, price rallies above the 1 x 1 angle from the Nov.16 top. A 62%

retracement of the Nov.16 high to the Dec. 4 low falls at 6.21. On Dec. 14, price makes a high at 6.21, a price that coincides on that date with the 2 x 1 angle from the Nov.16 high and the 1 x 1 angle from the Oct. 16 LOW. From a price perspective relationship, we have an ideal price objective from where at least a minor high could be made. However, we must let the market itself indicate if change is being made.

Dec. 14 results in a gap signal day, a very reliable indication of reversal if it is made at a price and time when change is highly probable. We would sell at the close, when the reversal signal day would be confirmed, with an intraday protective buy stop just two cents above the high of the day. If we were not able to be aware of the price activity at any time during the day, the following day we would sell near the open if the open was within the range of the prior day.

Dec. 15 opened at 6.19 at the close of the prior day and made a slightly higher intraday high. The day resulted in an outside reversal day, very strong confirmation of at least a minor top and the validity of our price analysis and trading strategy. The protective buy stop for the short position taken at the open is at 6.24,3 above the 2 x 1 angle and 2 above the intraday high. Capital exposure for the short position is just $250 (5).

Price declined, making a minor low off the 2 x 1 angle from the Oct. 16 low. As the market decline, the intraday open protective buy stop is adjusted daily to 3 above the 2 x 1 angle from the Nov. 16 high. Price declined below the 2 x 1 angle from the Oct. 16 low to make a minor low on Jan. 5 at a 60% retracement of the Oct. - Nov. advance and traded along the 2 x 1 angle from the Oct. 16 low as resistance.

Price has now traded below the 2 x 1 support angle and to a 60% retracement of the prior swing which is usually the maximum percentage retracement to expect if the prior trend, in this case the bull trend, is to continue. In most cases, if a bull trend is to continue, price will not trade below the 2 x 1 angle from the prior low. Should we consider that the Dec. 5 low is the termination of the correction, or just a minor low prior to the continuation of the declining trend to new lows?

Because Oct. 16 was a long term low and price advanced fairly rapidly to the prior swing high from that low, if price were going to continue to new highs above the Oct. 2 swing high, only minor reactions should occur and price should not decline below a 50% retracement of the advance. Any further retracement would indicate that there was not enough buying power to take prices above the prior highs and the rally was possibly just a short covering rally with no sustained buying power.

With the decline below the 2 x 1 support angle from the Oct. 16 lows and below the 50% retracement price zone, I would consider that there was not enough buying power to take prices higher and a continued decline to the old lows or lower was likely. In other words, at this point in time, I would look for opportunities to add to the profitable short position.

Here is another one of my rules derived from the geometric angles that I have found to be very reliable and profitable: "Price will often exceed an angle by a small amount and "test" the angle from the other side before continuing in the direction of the trend. Look for indications of reversal at the "test" of the angle for the termination of the minor counter trend swing."

We would now want to look for an appropriate place to add to the short position. Price continues to trade along the 2 x 1 angle from the Oct. 16 low until it reached the 2 x 1 angle from the Nov. 16 high. The 2 x 1 resistance angle from the Nov. 16 high is what I call an "active angle." This angle has previously shown resistance (Dec. 15 high). An active angle is an important angle, because it has proven its value and is a known quantity.

Jan. 8: The protective buy stop for the short position is adjusted daily to 3 above the 2 x 1 angle from the Nov. 16 high. Place an MIT sell order to add to the short position at 2 below this 2 x 1 angle, adjusted daily. On Jan. 12, price gapped up on the open, advanced just .5 above the 2 x 1 angle and finished the day as an outside reversal day with a close below the prior two day's lows. Note the coincidence of the two angle lines at this point in time also coincided with the minor swing high of Dec. 29. If one were aware of the price activity during the day, another short position would be entered on the close when the reversal indication and top was confirmed. Two days later, price closes sharply below the prior swing low and the 4 x 1 angle from the Oct. 16 low confirming the top of Jan. 12.

Price is now in the third declining section or an Elliott 5th wave. This is most likely the final declining section and price should bottom at or above the Oct. 16 low. The 2 x 1 angle from the Nov. 16 top is too far away from the market to consider for protective buy stop placement for the profitable short positions.

Let's consider another one of my angle rules: "The angles from the prior minor counter trend extremes are the most relative to the immediate price activity. If price is likely to be in the final swing in the direction of the main trend and declining or advancing beyond one of the fast angles (l x 2, 1 x 4, 1 x 8) from the prior minor counter trend extreme, consider the 1 x 2 angle or greater in determining protective stop placement and as in indication of change in trend."

From the Jan. 12 top, the market is making the most rapid decline to date, falling below the 1 x 2 fast angle. A strong indication that a low has been made or will soon be made is if price should either close l or more or advance intraday 3 or more above the 1 x 2 resistance angle. We could use the 1 x 2 angle as-a reference to place the protective buy stop for the short positions. The first few days of the decline is rapid, declining substantially below the 1 x 2 angle. If we were to just use the 1 x 2 angle for stop placement, the stop would be a considerable distance above the market and would give back far to much well earned profit if hit. We must have an alternative reference for stop placement in this situation.

Let's recall the position of the market. Price is in the third and most likely final declining swing. Price is near a very important support area, the Oct. 16 swing low, which is not likely to be exceeded without a substantial rally related to the entire decline from Nov. 16. Price is declining at the greatest rate of any declining swing since the Nov. 16 top. Price should not react more than 50% of the decline from the Jan. 12 high prior to the termination of the decline. If price should rally more than 50% of the decline to date from the Jan. 12 high, the intermediate term decline is most likely over, and we would want to exit the market.

With this information, we would place the protective buy stop for the two or three short positions at the lower of a 50% retracement of the decline to date from the Jan. 12 high or 3 cents above the 1 x 2 angle from the Jan. 12 high. On Jan. 24, price makes an intraday high precisely at the 1 x 2 angle. At this point in time, 3 above the 1 x 2 angle would be lower than a 50% retracement and the stop would not have been hit.

Note the price and angle position in late Jan. The Oct. 16 low was at 5.79. The 1 x 1 angle from the Nov. 16 top, the beginning of the intermediate term decline, fell at the Oct. 16 swing low of 5.79 on Jan. 29. On Jan. 29, PRICE (the 52 range of the Oct. 16 - Nov. 16 rally) SQUARED IN TIME (52 business days from the Nov. 16 high). Jan. 29 was actually 49 trading days (there were three non - trading holidays) from the Nov. 16 high. Forty-nine is an important time count. Gann called 49 the "death zone" and instructed to be alert to change at 49 time units from any important high or low. Fifty-two is another important time count and is related to the 52 weeks of the year. Fifty two is a particularly important time and price count relative to the soybean market.

Most traders who are familiar with geometric angles usually make the mistake of only considering angles from highs as resistance angles. In many cases, they are more important as support angles that will often indicate termination of a decline. Another of my rules for angles: "An intermediate or long term decline is often terminated at an angle from the extreme high. Should the TIME, PRICE and PATTERN FACTORS indicate that the market is in the final section of a trend and the market make an intraday low at or very near an angle from the extreme high, look for indications of the termination of the trend, as the trend will probably have terminated." Reverse for a bull move.

In the week of Jan. 22, price was declining near the 1 x 1 angle from the Nov. 16 high and the beginning of the declining trend. Should price decline into this 1 x 1 angle, at least a minor reaction is likely and more than likely a low that terminated the decline from Nov. 16 was likely. Adjust daily an MIT buy stop for three July soybeans at the lower of 5.82 (3 above the Oct. 16 low) or 2~ above the 1 x 1 angle from the Nov. 16 high. If this price objective is hit, the profitable short positions would be closed out and a long position taken.

The protective sell stop for the new long position would be placed at 5.76 (3 below the Oct. 16 swing low). This profit objective and reversal stop was placed because the market was at a TIME, PRICE and PATTERN when the termination of the decline from the Nov. 16 high was likely. If this objective was not met prior to a rally, the protective buy stop 2 above the 1x2 angle would have taken us out of the profitable short position.

Price continues to decline making an outside reversal day on Jan. 29 with a low at the exact coincidence of the 1 x 1 angle from the Nov. 16 high and the Oct. 16 low. The activity confirmed a low for Jan. 29 and that price was likely to rally at least 40-50% of the Nov. 16-Jan. 29 decline. The MIT buy order was hit Jan. 25 at 5.83. With the protective sell stop for the new long position at 5.76 for a $350 capital exposure. The buy order 3 above the 1 x 2 resistance angle would be canceled.

Note that each action taken throughout this period was with reason and purpose. The geometric angles were used as one price factor to determine potential support and resistance. When properly used in conjunction with a proven trading plan and trading strategies, the geometric angles are a very useful tool. Beware of those who have little experience in the proper use of the angles and attempt to make you believe that they can be used by themselves as indications of support and resistance. They can not. Prove to yourself from the study of past market activity the proper use of the geometric angles. My course, THE W. D. GANN TRADING TECHNIQUES HOME STUDY COURSE, follows market activity day by day over long periods of time in this manner to teach traders how to view the market from all perspectives and how to make a trading decision in any market at any time.

In the next issue of TRADER'S WORLD, I will continue the analysis of the bean market and how to properly use the geometric angles to make trading decisions. I will give you a few more of my proven rules to use to make trading decisions and develop trading strategies. This article was completed and submitted on April 17, 1990. In the next issue, I will describe the market activity from the 1/29/90 low and why my TIME, PRICE and PATTERN analysis, including the price activity related to the geometric angles resulted in my going long the bean market today.

ROBERT MINER is the author of the authoritative and comprehensive W. D. GANN TRADING TECHNIQUES HOME STUDY COURSE and the publisher of the PRECIOUS METALS TIMING REPORT. For further information: GANN I ELLIOTT EDUCATORS, 6336 N. Oracle Rd., Suite 326-151, Tucson, Az 85704. (602)-797-3668.

How To Use Gann in the Agricultural Markets

By David Gleason

There is a time for everything under heaven: A time to be born and a time to die, a time to plant and a time to harvest, a time to break down and a time to build up, a time to weep and a time to laugh, a time to gain and a time to lose, a time for war and a time for peace. (Ecclesiastes 3:1)

William D. Gann told his students to read the bible three times to gain understanding and wisdom. Ecclesiastes 3:1 indicates the truth of cycles. TIME IS RELATED TO PRICE. Everything is in a cycle including commodity prices. An example of this would be Gann's square of 144. To start a square of 144 use a major cycle high or cycle low. It can be done on a daily, weekly, monthly or a yearly chart.

Terminology is a important part of understanding the square of 144. Let's review some of the terms.

START OF THE SQUARE The beginning of the square is calculated from a contract high or contract low.

ONE-EIGHTH POINTS A square of 144 is divided into eight each segment lasts 18 weeks.

ONE-THIRD POINT This division point occurs on week 48 from the beginning of the square.
MID-POINT This division point occurs on week 72 from the start of the square.

FIVE-EIGHTH POINT This division point is on week 90 from the beginning of the square.

TWO-THIRD POINT This division point is on week 96 from the beginning of the square of 144.

END OF THE SQUARE This occurs on week 144, hence the end of the square.

For an example I chose the weekly corn chart. Once a contract low is established the first surge of buying will end on the first or second 1/8 division point. In the case of corn it rallied 18 weeks to the first 1/8 division point. I have labeled this first surge as circle wave 1 on the weekly corn chart.

The correction wave, labeled circle wave 2, can be expected to last 8 to 18 weeks. One of two cycle lows often will end the correction. You can find these cycles by counting over 26 and/or 34 weeks from the contract low. Corn's correction ended on week 26 from the contract low.

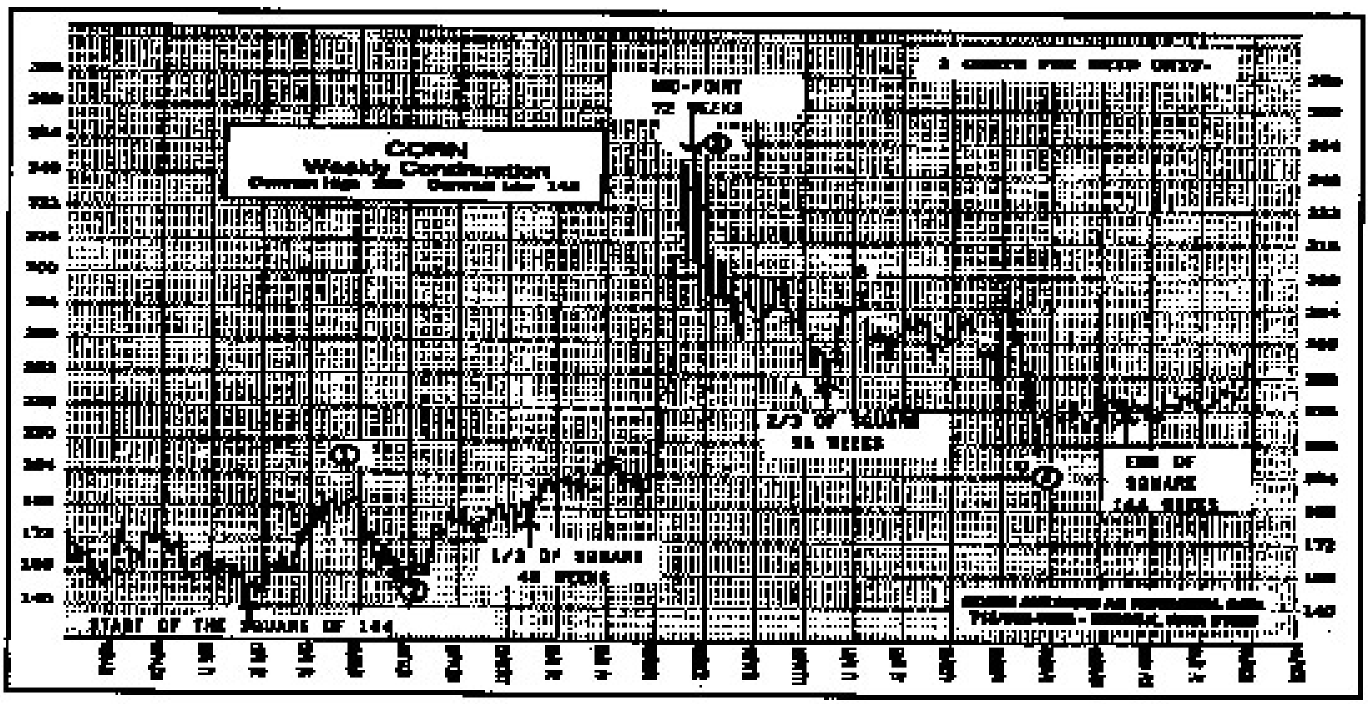
Calculating the target price for wave circle 3 is more difficult then wave circle 1 or wave circle 2. Time plays a larger role in calculating wave circle 3. When time expires, the uptrend is over. Time usually expires on a Gann division point. There were four division points where corn could have ended wave circle 3. The mid-point, five-eighth, two-thirds and the end of the square. Experience has taught me to not judge the division points too far in advance as cycle highs or cycle lows, always wait until a few weeks before they arrive before making a final decision. Corn reached our Fibonacci price target of $3.60 on week 72. Week 72 is the mid-point in time for the Gann square of 144 weeks. This coincided with the July 5 anniversary date familiar to all grain traders.

Why did corn finish the correction wave circle 4 at $2.17? To answer this question let's start from the 1988 contract high of $3.59. The first surge of selling ended on December 5, 1988 at $2.50. We will label this first surge of selling as wave A. This was a 50 percent correction from the contract low of $1.42 to the contract high of $3.59. Corn then made a 38% retracement back toward the contract high of $3.59. Stopping at $2.92. We have labeled this as the retracement wave B.

The length of wave A was 108 cents ($3.59 - $2.51 = $1.08). The length of wave B was 41 cents. ($2.92 - $2.51 = S.41). To find the length of C: add A + B and divide this sum by 50. 108 + 41 = 149. 50% of 149 = 74 cents. The calculation for the length of the C wave is 74 cents. $2.92 - .74 = $2.17. The difference between the contract high of $3.59 and the contract low of $1.42 is $2.17. When several calculations match it's called clustering. I like to see a cluster of numbers when predicting a top or bottom. $2.17 ended the correction wave circle 4.

To have a good technical analysis you need to be able to relate time and price. This is called time and price squaring. How can the numbers 72, 144, 217 and 360 be related? Using the Fibonacci sequence we easily find the correlation. (x = 72) Ix = 72, 2x = 144, 3x = 216, Sx = 360. Corn time and priced squared at $3.59. Corn time and priced squared again at $2.17. The next number in the sequence is 8x. 8 x 72 = 576. Yes, it is possible for corn to reach $5.75 on wave circle 5. Of course 5.75 could pertain to the 5.5 year cycle in corn.

We can use the Gann square of 144 as a valuable tool and look weeks in advance at important highs and lows. Can you imagine what it would have been like in 1988 to look at the weekly corn chart with the Gann division points marked? I clearly remember that exciting year. We sent out several chart recommending to purchase July corn at $2.09. Then in our June issue we recommended to take the profits on our corn position July 5 on the opening,



at the exact top of the market!

I have used Gann for years in the agricultural commodities and it continues to amaze me. The best explanation I have found for why it works is Ecclesiastes 3:1. "There is a TIME for everything and a season for EVERY activity under heaven".

David Gleason is editor of North American Ag Charts and author of the North American Ag Update which can be seen daily on the Data Transmission Network. He is a licensed CTA and a commodity broker for World Trade. Write or call: Box 313, Okobofi Ia. 51355 (712) 332-2779.