Gann: Angles and the Square of Nine

By Bill McLaren

I believe it is prudent that I begin by prefacing this article with a few cautions. First, there is an abundance of misinformation related to the theory of Gann analysis that is available to the novice trader. Other schools of trading thought involving Fibonacci, Andrews, or Elliott may be related to some aspects of Gann, but beware of "pundits" that group some or all these schools under the umbrella of Gann theory. They are blatantly misguided. Second, you must have a basic understanding of price movement to be successful in trading. This knowledge is the foundation of analysis and all else is built upon it. Gann, Elliott, or even oscillators all present probabilities, but the only thing that is a certainty is that which is occurring on the price chart. The pattern in the movement of prices should justify the probability that your indicator is giving you the right signal. Third, quoting Mr. Gann, Whenever price and time are squared, you can look for a change in trend." The key word in his statement is "look." This means to look for some evidence that the trend has changed before positioning on that probability. I gave a seminar last year where the basic theme was stop trying to pick tops and bottoms and learn how to earn money trading." What I was attempting to explain in the seminar was how to identify what I call counter trend movements. Counter trend movements are identified as the first rally after the fall-off of prices from a significant high. When prices are trending upward, prices will tend to fall sharply off a significant high, either 1 to 3 days or 7 to 10 days depending on the momentum of the move. But after a high that completes a move, the fist counter trend will usually be within 1 to 3 days long. (Note IBM chart Figure #3) Conversely, the opposite is true when prices are trending downward. Once you've been able to locate these counter trend movements, I believe you will have acquired the knowledge to trade successfully.

The Use of Angles

Gann angles are employed for many reasons but probably the two most important being first, to define when price and time are back in balance with each other and second, to show the strength or weakness of a position. They are not to be used to randomly buy or sell support and resistance levels. Since the Gann method of charting is done on geometric charts where the two axis represent the same space movement, the angles therefore are a geometric relationship to price and time. The 1 x 1 (or 45°) angle line moves at the rate of one price increment to one time increment, so on a weekly stock chart this would represent one point per week. The slower 1 x 2 moves at 1/2 point per week and the faster 2 x 1 moves 2 points per week.

Referring to figure #I we see that a stock hits a high of $36 and moves down. Assuming that this is a weekly chart, when the 45° angle from the high moves down to zero, time would have moved 36 weeks and if a 45° angle were drawn up from zero at the time of the high, where those two angles meet would represent 50% of the high price ($18) in both price and time. This would obviously be very strong support on the geometric chart as price and time would be balanced or "squared" at a harmonic 50% of the high price.

Figure #2 shows that from the low, price moves above the 2 x 1 angle, then falls back to
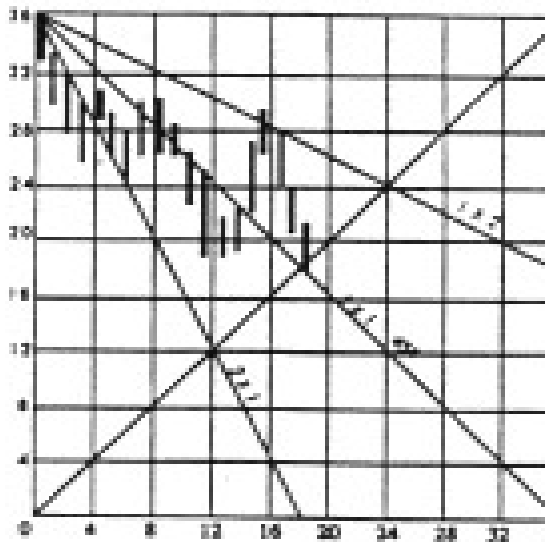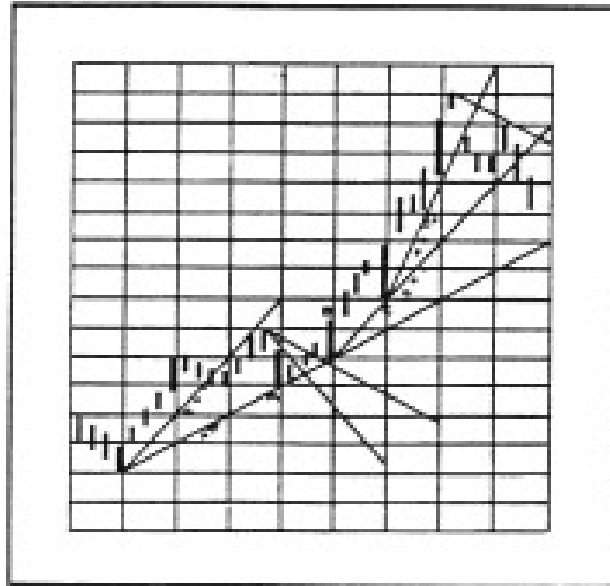
Figure 1

Figure 2

rest on the 45° angle (at point A) bringing price and time back into balance. At point "B" price moves above the 45° angle from the swing high placing the movement in a strong position from the tow (above the 45° angle) and strong position from the high (above the 45° angle from high), indicating a resumption of the uptrend. This is an example of a blow-off movement. Notice how at point "C" price finds the low at the next ascending angle, then again at point "D" on the next higher ascending angle. At point "A", price could have broken the 45° angle but at point NB" if price recovered that same 45° angle and also moved above the 45° angle from the high then the same conclusion would apply.

Figure #3 shows a daily chart of IBM. Notice how the high was precisely against the angle from the low "squaring price and time" and indicating a possible change in trend. There are many ways to qualify that probability is an important high and one of the ways is with the "square of nine" which we will look at a little later in this article.

Figure #4 shows a daily chart of the S&P contract. Notice how the last high is again squared with an angle from the low. This Squaring" occurs 36 days from the low and 72 points up from the low. Those well versed Figure #2 in Gann theory will recognize 36 x 72 as important harmonies of 144 and therefore qualifying that N squaring" as important.

Square of Nine

The square of nine, or spiral chart, is a very valuable tool for trading and forecasting. See Figure #5. It is used as a way to see the vibration of prices in degrees. It has been my experience that 90% of all stock's price swings will fit into these degrees of movement. Look at figure #5. Around the outside of the square of nine are the dates of the year. This circle encompasses a spiral of numbers, the first cycle of numbers ranging from 1 through 9. Notice on the 45 angle running from the center northeast to the date of May 6th are the squares of even numbers: 16, 36, 64, 100, 144, etc. Moving down to the southwest corner are squares of odd numbers: 25, 49, 81, 121, 169, etc. These are "natural" resistance levels but should be confirmed with other indicators. However, some stocks and the Dow Jones Industrial Average are uncanny for hitting

significant highs and lows on exact squares of numbers.

There is one other aspect to using the square of nine. It is that the geometric angles can be overlaid on top of the spiral chart (Figure #6). Figure #3 shows an IBM chart where the low was at the 95-6 level. The first important high was at 116 followed by a counter trend move down to 105, then finally a blow-off into the high at 139. I have circled those prices on the square of nine and noted the degrees of movement on the IBM chart. You can also find these degrees of movement mathematically. For instance, to locate a 180 movement, take the square root of the number, add 1, and square the total. To find 360, add 2 to the square root and square that total. Now go back to figure #5 and look at the dark line that cuts across the chart. It starts on August 23rd and ends February 19th. The low on IBM occurred August 23rd (first of the double bottoms) and the high occurred February 19, or exactly 180 in time. Moving 360 in price and 180 in time while "squaring" the high price with the low on the trading day chart gave a probability that 139 on February 19th could be a significant high point