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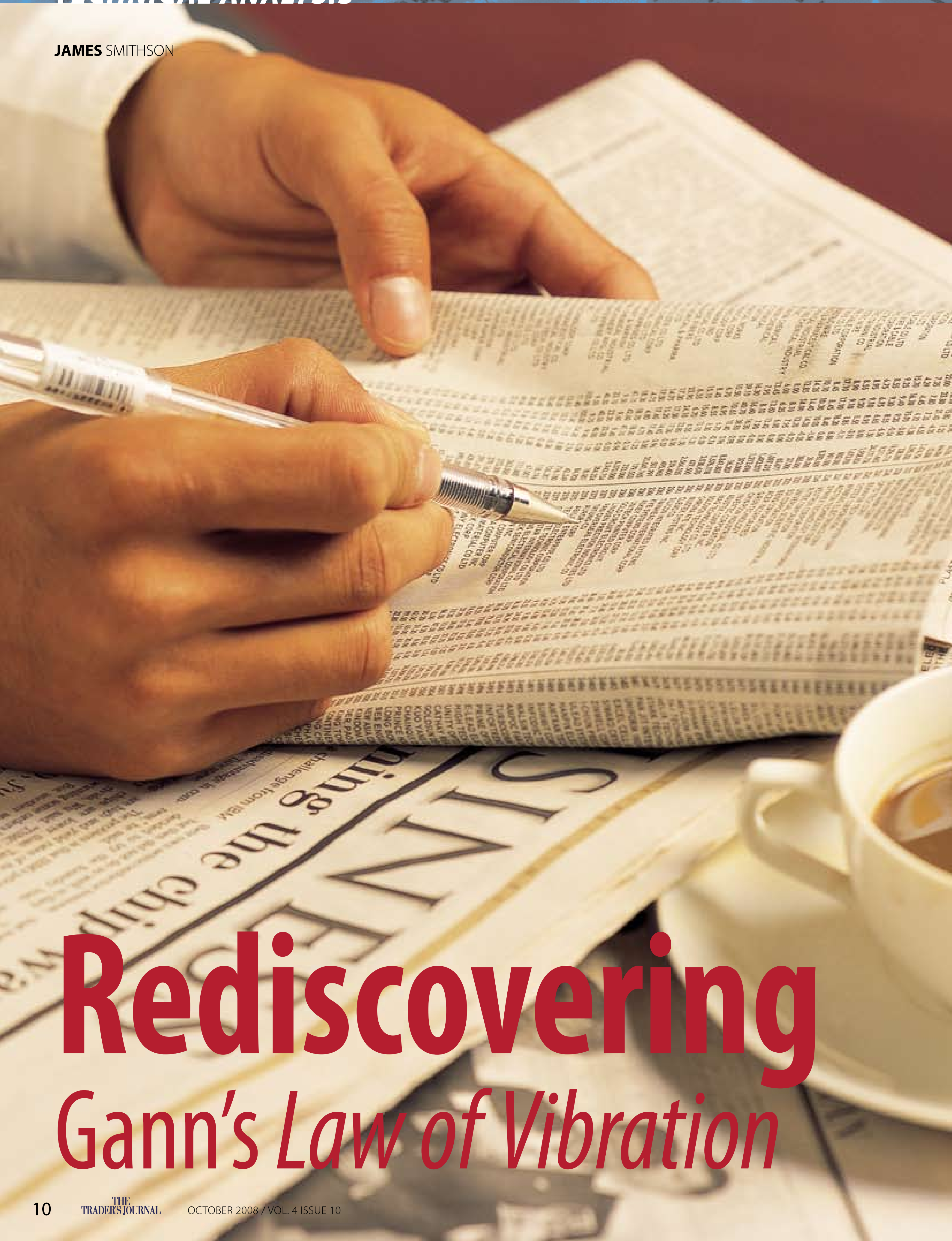


Rediscovering Gann's *Law of Vibration*

James Smithson discusses the discovery and use of Gann's '*Law of Vibration*,' a method for accurately forecasting the trends of the stock and commodities markets

Introduction

William D. Gann (1878 – 1955) was an outstanding technical analyst. He was also a prolific teacher of how to make speculation a profitable profession, writing seven books and producing two courses on trading the stock and commodities markets. However, Gann's superlative skill was his ability to accurately forecast the stock and commodities markets. Gann's forecasting method was based upon what he called the '*Law Of Vibration*.' This article seeks to rediscover Gann's '*Law Of Vibration*.'

GANN'S GREAT DISCOVERY OF AUGUST 8TH, 1908

Almost one hundred years ago, Gann made one of his most important discoveries.

More specifically, as Gann recorded in his booklet entitled *"Why Money is Lost on Commodities and Stocks and How to Make Profits"* (1954):

"1908 May 12th left Oklahoma City for New York City. August 8th made one of (his) greatest mathematical discoveries for predicting the trend of stocks and commodities. Started trading with a capital of $300 and made $25,000. Started another account with $130 and made $12,000 in thirty days' time."

On August 8, 1908, Gann was 30 years old. Moreover, he was 76 years old when in 1954 he wrote his booklet *"Why Money is Lost on Commodities and Stocks and How to Make Profits."* Gann clearly made an important discovery on August 8, 1908, because he recalled the precise date 46 years later.

In December 1909, he gave an interview to the *"Ticker And Investment Digest"* magazine, sixteen months after his important discovery. The overall conclusion from this interview is that Gann had discovered a unique method to precisely forecast the trend of stocks and commodities. The forecast was based upon what he called the '*Law Of Vibration*,' and he was achieving great financial success in its practical application.

Gann's major discovery appears to have been some crucial and practical part of his forecasting method that he called the '*Law Of Vibration*' and he provided a partial explanation of this *Law Of Vibration* in his interview. More specifically, he made it clear that he would not provide a detailed explanation ("Mr. Gann has refused to disclose his method at any price", Ticker interview). However, he was willing to provide a general description of his *Law Of Vibration* ("We have asked Mr. Gann for an outline of his work, and have secured some remarkable evidence as to the results obtained therefrom," Ticker interview).

THE PRINCIPLES OF GANN'S LAW OF VIBRATION

The principles of Gann's *Law Of Vibration*, as discerned from his interview of December 1909 to the *"Ticker And Investment Digest"* are as follows.

1. Stocks and commodities (and everything else on earth) vibrate. Moreover, vibration provides a comprehensive explanation of price movement in financial markets.

   "Vibration is fundamental; nothing is exempt from this law; it is universal, therefore applicable to every class of phenomena on the globe…. After years of patient study I have proven to my entire satisfaction, as well as demonstrated to others, that vibration explains every possible phase and condition of the market" (*Ticker* interview).

2. Stocks and commodities vibrate in accordance with both their own individual energy/vibration (i.e. internal vibration) and also in accordance with energy/vibration transmitted through space (i.e. external vibration).

   "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 vibration" (*Ticker* interview).

3. The overall energy/vibration of a stock or commodity is reflected in its price.

   "These vibratory forces can only be known by the move-

ments they generate on the stocks and their values in the market" (*Ticker* interview).

4. Financial markets essentially comprise a series of impulses that produce price movements with specific rates of vibration.

   "Science teaches that an original impulse of any kind finally resolves itself into periodic or rhythmical motion" (*Ticker* interview).

5. The price movement of a stock or commodity unfolds in a coherent way because stocks and commodities are essentially centres of energies and these energies (or vibrations) are controlled mathematically.

   "Stocks, like atoms, are really centres of energies. Therefore, they are controlled mathematically.... There is no chance in nature because mathematical principles of the highest order lie at the foundation of all things" (*Ticker* interview).

6. When the overall vibration of a stock or commodity is in balance, its price will maintain a constant rate of vibration (i.e. prices will form a trend). Consequently, this overall rate of vibration (or trend line) can be precisely measured and future prices forecast by means of the so-called Gann angles or Gann fan lines (i.e. 1 x 1, 1 x 2, 1 x 4, 1 x 8 angles, etc. and their subdivisions).

   "The power to determine the trend of the market is due to my knowledge of the characteristics of each individual stock and a certain grouping of different stocks under their proper rates of vibration. Stocks are like electrons, atoms and molecules, which hold persistently to their own individuality in response to the fundamental Law Of Vibration.... After exhaustive researches 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" (*Ticker* interview).

7. These principles can be applied to forecast the trend of stocks or commodities over multiple timeframes. For example, a minor impulse may produce a price movement with a specific rate of vibration that lasts only a few hours. Alternatively, a major impulse may produce a price movement with a specific rate of vibration that lasts for a number of years (e.g. the rise in the Dow Jones Industrial Average from 1921 to 1929).

   "The law which I have applied will not only give these long cycles or swings, but the daily and even hourly movements of stocks" (*Ticker* interview).

8. The external energy/vibration acting on a stock or commodity is in fact astrological influences.

   Unfortunately, Gann does not explicitly state this in his Ticker interview. This is not surprising in view of the fact that Gann made it clear he would not provide a detailed explanation of his *Law Of Vibration* ("Mr. Gann has refused to disclose his method at any price", Ticker interview).

Consequently, one has to turn to Gann's semi-autobiographical novel entitled "*The Tunnel Through the Air,*" written eighteen years later in 1927, for supporting evidence on this key principle. Such supporting evidence includes the following excerpts.

"Robert was a great believer in astrology because he had found this great science referred to so many times in the Holy Bible.... He had made notes as he read "The Bible" at different times where it referred to astrology or the signs in the heavens and was thoroughly convinced that the influence of the heavenly bodies govern our lives" (*The Tunnel Through the Air*, page 172).

"I believe in the stars, I believe in astrology, and I have figured out my destiny. "The Bible" makes it plain that the stars do rule" (*The Tunnel Through the Air*, page 66).

"Through my study of "The Bible," I have determined the major and minor time factors which repeat in the history of nations, men and markets" (*The Tunnel Through the Air*, page 70).

*"I have studied "The Bible" very carefully because I believe it is the greatest scientific book ever written. The laws are plainly laid down how to make a success. There is a time and a season for everything and if a man does things according to the time, he will succeed" (*The Tunnel Through the Air, page 204).

"Robert had gone deeply into "The Bible" study in order to learn more about the great science of astrology" (*The Tunnel Through the Air*, page 213).

"He read all the books he could get on astrology and began to understand why things had happened as they had" (*The Tunnel Through the Air*, page 215).

1. Astrological influences act in a way that is analogous to radio waves; i.e. they have a specific wavelength, they travel through space and they are received by and influence those stocks and commodities that vibrate with a resonant frequency.

   "It is impossible here to give an adequate idea of the Law Of Vibration as I apply it to the markets. However, the

layman may be able to grasp some of the principles when I state that the Law Of Vibration is the fundamental law upon which wireless telegraphy, wireless telephones and phonographs are based" (*Ticker* interview).

2. From time to time, a stock or commodity will lose its sensitivity (or receptivity) to astrological influences (i.e. to external energy/vibration). As a consequence, it will become inert (i.e. its rate of vibration will fall) and its price will typically enter a downtrend.

   "Stocks create their own field of action and power; power to attract and repel, which principle explains why certain stocks at times lead the market and 'turn dead' at other times" (*Ticker* interview).

3. Thus, the key technique in applying the *Law Of Vibration* is to accurately identify the major astrological influence driving a particular stock or commodity, to identify the resultant rate of vibration and to forecast how future astrological influences will impact this rate of vibration.

   "By my method, I can determine the vibration 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" (*Ticker* interview).

4. Taken together, these principles of the *Law Of Vibration* constitute a coherent theory of how financial markets work. Indeed, they constitute a new paradigm. However, as with any new paradigm, it challenges the conventional wisdom and therefore encounters resistance from practitioners of the conventional wisdom.

   "It appears to be a fact that Mr. Gann has developed an entirely new idea as to the principles governing stock market movements.... We have asked Mr. Gann for an outline of his work and have secured some remarkable evidence as to the results obtained therefrom. We submit this in full recognition of the fact that in Wall Street a man with a new idea, an idea which violates the traditions and encourages a scientific view of the proposition, is not usually welcomed by the majority, for the reason that he stimulates thought and research. These activities said majority abhors" (*Ticker* interview).

THE PRACTICAL APPLICATION OF GANN'S LAW OF VIBRATION

Now, we will turn from an examination of the general principles of the *Law Of Vibration*, as discerned from Gann's interview to the "Ticker And Investment Digest," to an examination of the key steps in its practical application. These key steps in the practical application of Gann's *Law Of Vibration* are as follows.

1. Identify the point in time that marks the start of an uptrend or downtrend. This can be achieved by examining the daily, weekly or monthly price chart of the stock or commodity.

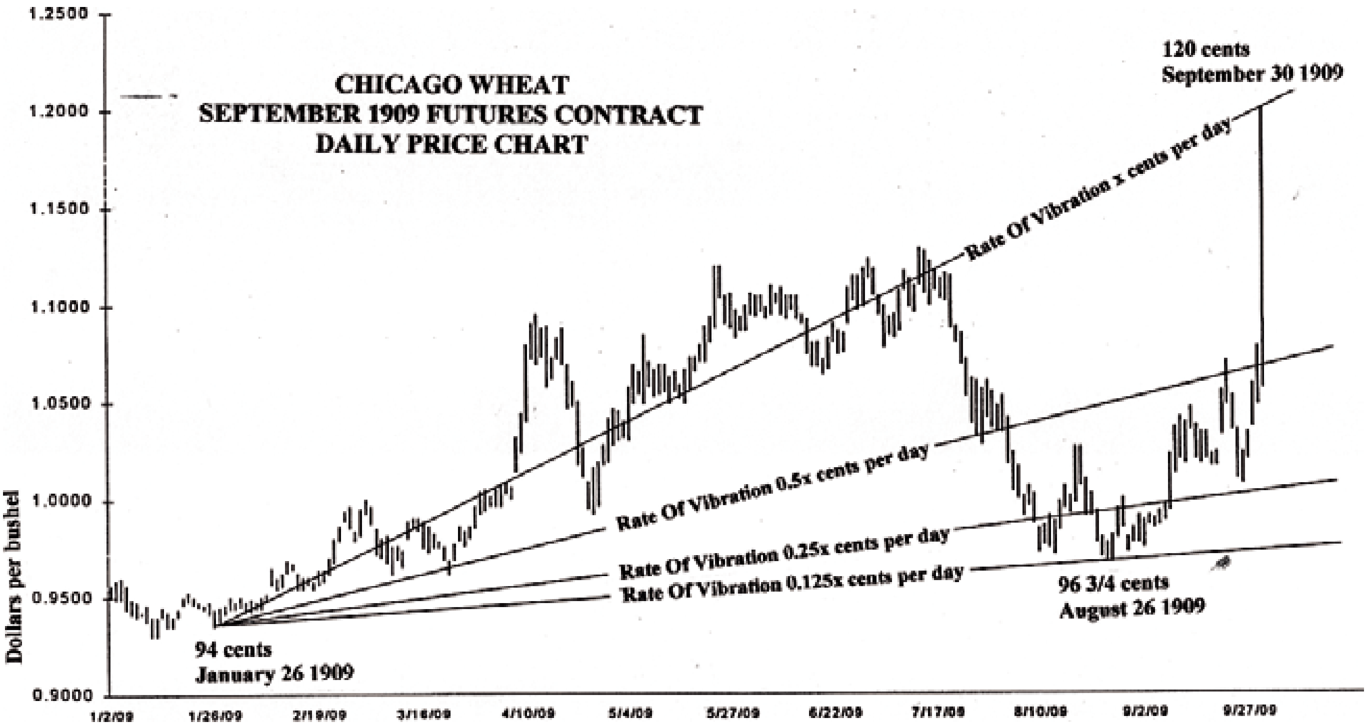
2. Identify the predominant astrological influence (or cycle) driving the uptrend or downtrend. In order to achieve this, it will be necessary to examine previous cycles of the stock or commodity in order to identify which particular astrological influences have driven the stock or commodity in the past. In this task, it will be especially helpful to examine the all-time high and all-time low price of the stock or commodity because at these price extremes the astrological influences will typically be very strong or very weak, respectively. Thus, under the *Law Of Vibration*, a high price is caused by a high rate of vibration, which in turn is caused by strongly positive astrological influences (and vice versa).

3. Identify the general rate of vibration of the uptrend or downtrend. This can be achieved by placing the origin of the Gann angles (or Gann fan lines) at the starting point (in time and price) of the uptrend or downtrend. In this task, it will be helpful to have prepared a transparent plastic chart overlay inscribed with the major Gann angles (i.e. 1 x 8, 1 x 4, 1 x 2, 1 x 1, 2 x 1, 4 x 1, 8 x 1, etc.) and their subdivisions.

4. Forecast the approximate date when the predominant astrological influence (or cycle) that is driving the uptrend (and was identified in point 2) will end. This can be achieved by consulting an ephemeris and the astrological chart of the start of the uptrend or downtrend.

5. Forecast the future price when the uptrend or downtrend will end. This can be achieved by identifying the intersection of the general rate of vibration of the uptrend or downtrend (point 3) and the forecast date that the uptrend or downtrend will end (point 4).

6. Monitor one's forecast, which comprises all of the above elements. In particular, note that short-term positive astrological influences will increase the rate of vibration and temporarily drive prices above the long-term rate of vibration (i.e. above the long-term Gann angle identified in point 3). Conversely, note that short-term negative astrological influences will decrease the rate of vibration and temporarily drive prices below the long-term rate of vibration (i.e. below the long-term Gann angle). However, when these short-term influences expire, stock or commodity prices will revert to their long-term rate of vibration (i.e. the long-term Gann angle).



EXAMPLES OF THE PRACTICAL APPLICATION OF GANN'S LAW OF VIBRATION

Now, we will examine two examples of the practical application of Gann's *Law Of Vibration*, which are provided in his interview to the "Ticker And Investment Digest."

1) September 1909 Wheat futures contract (please see chart 1).

   "One of the most astonishing calculations made by Mr Gann was during last summer (1909) when he predicted that September wheat would sell at $1.20. This meant that it must touch that figure before the end of the month of September. At twelve o'clock, Chicago time, on September 30th (the last day) the option was selling below $1.08 and it looked as though his prediction would not be fulfilled. Mr. Gann said, 'If it does not touch $1.20 by the close of the market it will prove that there is something wrong with my whole method of calculation. I do not care what the price is now, it must go there.' It is common history that September wheat surprised the whole country by selling at $1.20 and no higher in the very last hour of the trading, closing at that figure" (*Ticker* interview).

1) Gann identified the start of the uptrend in the September 1909 wheat futures contract as a price of 94 cents on January 26, 1909.

2) Gann identified the predominant astrological influences driving this uptrend.

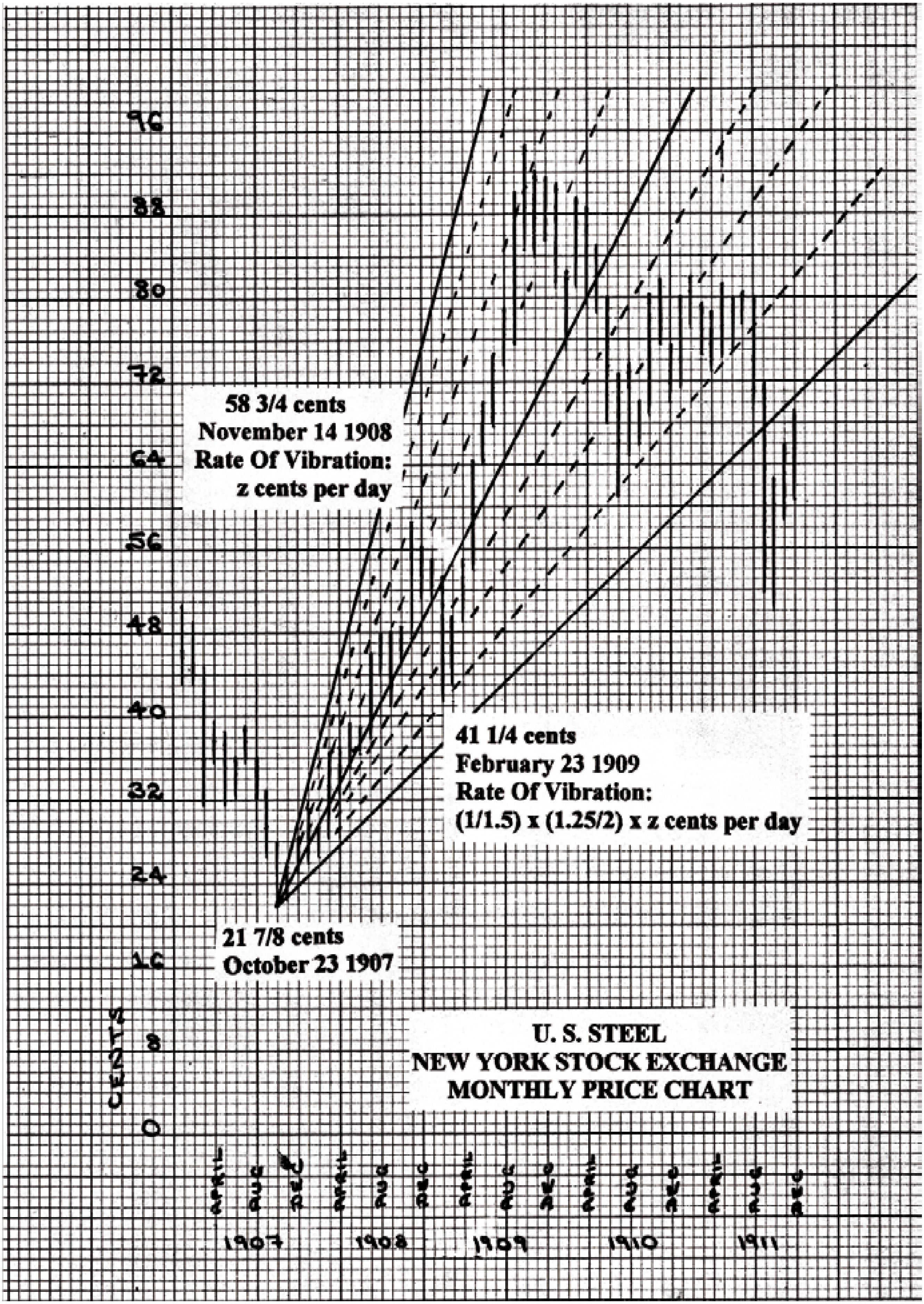
3) Gann identified the long-term rate of vibration of this uptrend, which was 0.1053 cents per day (or 1 cent per 9.5 days).

4) Gann forecast that the predominant astrological influences driving this uptrend would remain in force until at least the end of this futures contract (i.e. until at least September 30, 1909).

5) Gann forecast that at the end of the futures contract the price would be $1.20. This was based on the starting point of the uptrend (point 1 above), the long-term rate of vibration (point 3) and the contract's expiry date of September 30, 1909.

6) In monitoring his forecast, Gann observed that since the beginning of the uptrend on January 26, 1909, short-term astrological influences had temporarily driven prices above and below the long-term trend or rate of vibration. Gann also observed that between July 21 and August 26, 1909, stronger short-term negative (or malefic) astrological influences had driven prices down well below the long-term rate of vibration. Moreover, Gann observed that commencing August 26, 1909, (i.e. the low point of 96¾ cents) these strongly negative short-term influences started to expire and he forecast that they would fully expire over the next month, when prices would revert to their earlier long-term rate of vibration.

Importantly, Gann received corroboration of the low


58 3/4 cents
November 14 1908
Rate Of Vibration:
z cents per day
41 1/4 cents
February 23 1909
Rate Of Vibration:
(1/1.5) x (1.25/2) x z cents per day
21 7/8 cents
October 23 1907
U. S. STEEL
NEW YORK STOCK EXCHANGE
MONTHLY PRICE CHART
CENTS
96
88
80
72
64
56
48
40
32
24
16
8
0
1907
1908
1909
1910
1911

point in August from the fact that a price of 96¾ cents on August 26, 1909, equates to a rate of vibration of 0.0132 cents per day (based on the starting point of 94 cents on January 26, 1909). This rate of vibration is one eighth of the long-term rate of vibration of 0.1053 cents per day. Another perspective is that on August 26, 1909, the long-term rate of vibration of this wheat futures contract had halved three times. Thus, from August 26, 1909, Gann forecast and observed the simultaneous expiration of the short-term negative astrological influences and the doubling three times of the rate of vibration, as the long-term rate of vibration was regained on September 30, 1909.

2) United States Steel stock price (please see chart 2).

> **"He (Mr. Gann) came to me when United States Steel was selling around 50 and said, 'This Steel will run up to 58 but it will not sell at 59. From there, it should break 16¾ points.' We sold it short around 58 3/8 with a stop at 59. The highest it went was 58¾. From there it declined to 41¼; -17½ points"** (*Ticker* article).

1) Gann identified the start of the uptrend in U.S. Steel as a price of 21-7/8 cents on October 23, 1907.

2) Gann identified the predominant astrological influences driving this uptrend.

3) Gann identified the long-term rate of vibration of this uptrend, which was 0.0950 cents per day (or 1 cent per 10.5 days).

4) Gann forecast that the predominant astrological influences driving this uptrend would remain in force until October 1909, and hence in November 1908 he was only forecasting a short-term correction. More specifically, Gann made his forecast "When United States Steel was selling around 50," which was in early November 1908. Gann forecast that due to short-term negative astrological influences a correction would start on November 14, 1908 (i.e. within two weeks).

5) Based on the starting point of the uptrend (point 1) and the long-term rate of vibration (point 3) and the starting date of the correction (point 4), Gann was able to forecast that "Steel will run up to 58 but it will not sell at 59." In fact, the price of U.S. Steel peaked at 58¾ on November 14, 1908.

6) Gann forecast that the short-term negative astrological influences that he had identified would remain in force until February 23, 1909.

7) Gann forecast what the rate of vibration would fall to on February 23, 1909 (i.e which Gann angle would provide support before the long-term uptrend was resumed). Importantly, in making this forecast Gann subdivided the rate of vibration. More specifically, and as the price chart of U.S. Steel shows, Gann forecast that the price of U.S. Steel would fall to the bottom of its current vibratory band and finally fall three quarters of the band below. Thus, Gann forecast that the short-term correction would last until February 23, 1909, and that the rate of vibration of U.S. Steel would fall on that day from its long-term rate of 0.0950 cents per day to (1/1.5) X (1.25/2) X 0.0950 = 0.0396 cents per day. This is in fact exactly what happened. More specifically, on February 23, 1909, U.S. Steel made a low price of 41¼ cents (which based on the starting point of 21 7/8 cents on October 23, 1907, equates to a rate of vibration of 0.0396 cents per day). From that point, the long-term uptrend of U.S. Steel was resumed.

An important point from this example is that Gann did not merely use his so-called Gann angles as a crude measure of the rate of vibration of stocks and commodities. More specifically, he did not use them simply to measure the doubling and halving of the rate of vibration. Rather, he also discovered and employed sub-shells within a principal energy level, which is analogous to modern quantum theory. Therefore, we have discovered another important principle of Gann's *Law Of Vibration*; namely the rate of vibration of stocks and commodities, as measured by so-called Gann angles, conforms to a series of principal energy levels and sub-shells.

As we have seen, an important implication (and practical application) of this is that rates of vibration, as measured by these principal energy levels and sub-shells, constitute support and resistance levels. This clarifies the statement made by Gann: "By knowing the exact vibration 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" (*Ticker* interview).

Moreover, this principle in turn sheds light upon a somewhat obscure concept that Gann briefly introduced in his stock market course and his commodities course, namely the 'concept of lost motion:'

"As there is lost motion in every kind of machinery, so there is lost motion in the stock market due to momentum, which drives a stock slightly above or below a resistance level. The average lost motion is 1 7/8 points. When a stock is very active and advances or declines fast on heavy volume, it will often go from 1 to 1 7/8 points above a halfway point or other strong resistance level and not go 3 points. The same rule applies on a decline. It will often pass an important resistance point by 1 7/8 points but not go 3 full points beyond it. That is why I advise using a stop-loss order 3 points above a top or 3 points below a bottom" (W. D. Gann Stock Market Course, Chapter 10).

In summary, from examining examples of the practical application of Gann's *Law Of Vibration*, we have identified three further principles of the *Law Of Vibration*:

1) The rate of vibration of stocks and commodities conforms to a series of principal energy levels and sub-shells. More specifically, the principal energy levels equate to a doubling and halving of the rate of vibration and the sub-shells equate to a fourfold division of a principal energy level.

2) These principal energy levels and sub-shells constitute important support and resistance points.

3) When a stock or commodity is very active, momentum will often drive the price very slightly above or below the precise support or resistance point, which is determined by the rate of vibration (in conjunction with astrological influences).

GANN'S ANNUAL FORECASTS

As the examples from the *Ticker* interview show, around 1909 Gann was employing his *Law Of Vibration* to precisely forecast stock and commodity prices up to several months forward. However starting around 1915, Gann produced and sold annual forecasts of the stock and commodity markets. Although Gann produced these annual forecasts up to his death in 1955, relatively few survive. Nevertheless, from the surviving annual forecasts, it appears that Gann produced them in exactly the same way as he had produced his earlier shorter-term forecasts; namely based on the *Law Of Vibration*.

One particularly accurate annual forecast was Gann's 1929 stock market forecast (which Gann reproduced in the appendix of his book "*Wall Street Stock Selector*" written in 1930). In summary, Gann's *1929 annual stock market forecast* was completed and distributed on November 23, 1928, and included the following elements:

1) A narrative that stated "General Outlook For 1929. This year occurs in a cycle that shows the ending of the bull market and the beginning of a prolonged bear campaign…. The fact that it has run longer and prices have advanced to such abnormal heights means that when the decline sets in it must be in proportion to the advance. The year 1929 will witness some sharp, severe panicky declines in many high-priced stocks."

2) A projected graph or chart of the Dow Jones Industrial Average that forecasts this index would peak on August 7, 1929, and then starts a major downtrend for the rest of the year.

3) A projected graph or chart of the Dow Jones Railroad Average that forecasts this index would peak on August 8 or 9, 1929, and then start a major downtrend for the rest of the year.

Although it should be noted that the Dow Jones Industrial Average and the Dow Jones Railroad Average both peaked on September 3, 1929, (rather than in early August), overall Gann's annual stock market forecast for 1929 was highly accurate.

Moreover, from a careful examination of Gann's 1929 stock market forecast, it is possible to discern further principles of the *Law Of Vibration*. These principles are as follows.

1) Although the *Law Of Vibration* comprises a number of elements, the time factor is the most important. More specifically, throughout his career Gann used the term "time factor" as a substitute or synonym for astrological influences. Therefore astrological influences are the most important element in the *Law Of Vibration*.

   "The time given for tops and bottoms is the most important factor for you to know and watch. It makes no difference about the price a stock is selling at. So long as you know when it will reach low or high levels you can buy or sell and make money…. Remember you must buy and sell at the right time regardless of prices. No matter how high stocks are, if they are going higher, you should buy. It makes no difference how low they are; if the trend is down and they are going lower, you must sell short and go with the trend" (*1929 Annual Stock Market Forecast*).

2) In applying the *Law Of Vibration* to the stock market, it is important not only to assess the astrological influences (i.e. external vibrations) but also the internal vibrations of a stock. For example, assume that during a general stock market uptrend there is a short-term correction (due to negative astrological influences) and most stocks fall in price. If during that period of time, a particular stock merely moves sideways, rather than falls, it indicates that the internal vibrations of that stock are especially strong and therefore it will subsequently perform strongly when the overall uptrend (i.e. positive astrological influence) is resumed.

   "The Dow Jones 30 Industrial stocks are representative of the active industrials and most of them will follow the Industrial Curve (i.e. Gann's forecast) very closely. But some of the individual stocks that are in strong or weak position will vary from this curve and make tops and bottoms at different times. These special stocks and their position will be covered in the supplements each month" (*1929 Annual Stock Market Forecast*).

3) Stocks and commodities typically do not switch from an uptrend to a downtrend until their rate of vibration has slowed down. This reduction in the rate of vibration can be observed as prices move sideways (or down) over time to lower (and slower) Gann angles.

   "The ones (i.e. the stocks) that make top in the early part of the year and fail to reach higher levels in July or August will be the ones to lead the decline, because they will have had longer time for distribution. Guard against selling short the late movers until they have had time to complete distribution" (*1929 Annual Stock Market Forecast*).

It is important to note that although for many years Gann produced and sold annual forecasts of the stock and commodities markets, he did not intend for his subscribers to rely on these alone. Indeed, Gann recognised the importance of his subsequent monitoring of these markets and his regular updates. Consequently, Gann issued supplements, or updates, three times each week by means of his "*Supply And Demand Letter*," which he described as follows:

"People often write for my opinion on Baldwin, U.S. Steel, General Asphalt or some special stock. I judge the stock by the position of time and volume as it is today. If in a few days, I see a large amount of volume, up or down, I change my position, so it is not always what I think of a stock today, but what I am going to think of it later that counts. That is why I issue a tri-weekly letter because the market changes and I can advise my subscribers to change their position and protect themselves against losses. If the market never reversed its trend, there would be no need of a tri-weekly letter" ("*Wall Street Stock Selector*", 1930, appendix).

In the practical application of the *Law Of Vibration*, the time factor, or astrological influences are the most important element. Consequently, in preparing his annual forecasts, Gann was required to assess numerous astrological influences over the subsequent year. Assessing months in advance how strong astrological influences (both positive and negative) will be and how long they will remain in force is a complex task prone to error on occasion. Gann found it necessary to issue regular letters to his subscribers in order to clarify and correct his annual forecasts when necessary, as well as to identify particular stocks and commodities that were especially strong or weak. Therefore, at a fundamental level, Gann was constantly forecasting and monitoring external vibrations (in the form of astrological influences) and internal vibrations (in the form of assessing the particular strength or weakness of individual stocks and commodities).

CONCLUSION

This paper has identified, or rediscovered, many of the elements of Gann's *Law Of Vibration*. However, the most important and most difficult element is to identify and assess the past, present and future astrological influences on a stock or commodity.

Consequently over the next year, around the centenary on August 8, 2008, of Gann's discovery of the *Law Of Vibration*, this should be the principal focus of Gann researchers worldwide. Indeed, correctly identifying the true principles of astrology and the precise astrological influences impacting a particular financial market should perhaps be the focus of technical analysts in general who truly wish to extend the frontiers of technical analysis in the early twenty-first century.

Finally, the centenary of Gann's discovery of the *Law Of Vibration*, August 8 2008, was the starting date of the Olympic Games in Beijing, China. However, the ancient Greeks not only provided the world with the Olympic Games, but also an early example of financial forecasting through correctly assessing astrological influences. More specifically, the Greek philosopher and mathematician Thales of Miletus (who lived from 625 to 547 B.C) provides this example:

"There is an anecdote of Thales the Milesian and his financial device, which involves a principle of universal application, but is attributed to him on account of his reputation for wisdom. He was reproached for his poverty, which was supposed to show that philosophy was of no use. According to the story, he knew by his skill in the stars while it was yet winter that there would be a great harvest of olives in the coming year. So, having a little money, he gave deposits for the use of all the olive presses in Chios and Miletus, which he hired at a low price because no one bid against him. When the harvest time came, and many wanted them all at once and of a sudden, he let them out at any rate he pleased, and made a quantity of money. Thus he showed the world that philosophers can easily be rich if they like" (Aristotle's "*Politics*", Book One, Chapter Eleven).

It appears that the investment paradigm and methodology that Gann discovered approximately 100 years ago had in fact already been discovered and was in use some 2,500 years earlier.

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