APPENDIX G

SQUARE ROOT OF FIVE And SPIRALS OF INCREASE OF THE SECURITIES MARKET

This analysis has been included in an appendix since some readers can find it a po' too much technical. Although not null more he is complicated than a simple trigonometrical relation, some readers are not to they comfort with the mathematics in a generalized manner.

The "adjacent tangent" is the trigonometrical function that defines the relation between opposite sides and of a triangle that is not the hypotenuse. It is used in this analysis in order to find the angle that the PTV assumes with the aces of the time and the price. The reader does not have to know the used mathematics in order to obtain these angles in order to understand the main point of this section. However, if it wishes to verify the numbers used in this analysis, all the data and turn out to you are contained in G Table.1.

The spiral of increase based on the relationship of Fibonacci is more commonly used from the analysts of the financial market. This spiral was shown in Figure 3.2 and defined the subdivisions of the model of increase of five years between 1982 and 1987. This spiral is known like the Gold Spiral because every successive coil is defined from beams carriers with proportion towards the previous carrier in the relationship of PHI (1,618). The natural spirals of increase are not limited to the relationship of Fibonacci. As an example,

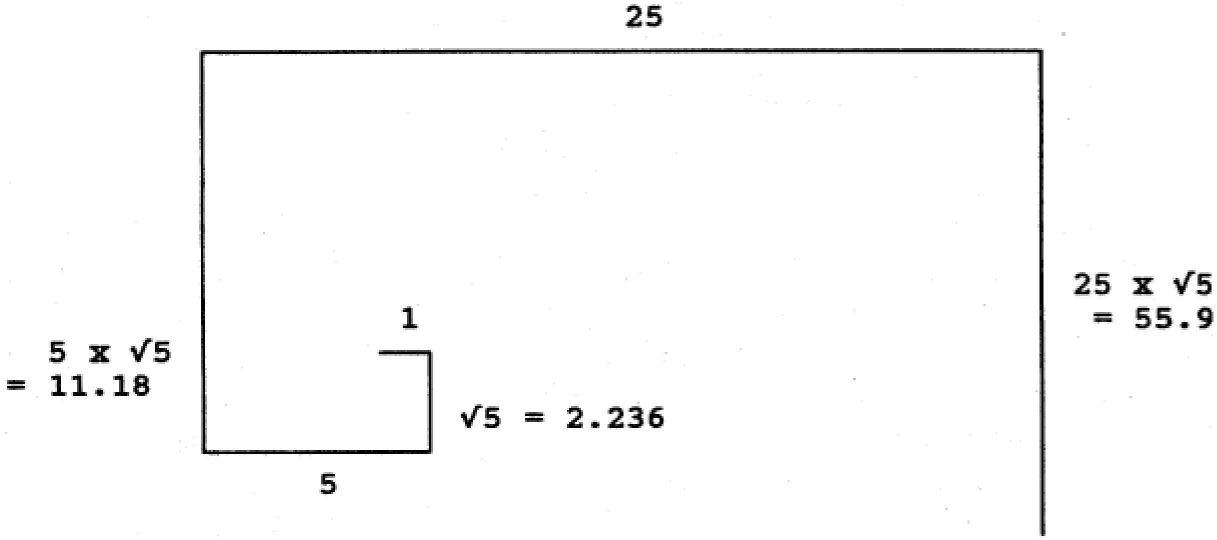
> **THE SPIRALS OF INCREASE OF THE SECURITIES MARKET ARE DEFINED FROM THE SQUARE ROOT OF THE FIVE RELATIONSHIP.**

This because in Lesson IV, **The RELATIONSHIPS PRICE - IMPORTANT TIME PIU' OF FIBONACCI,** the square root of five was described like "the more important relationship in the analysis of the securities market". Every successive coil in the spirals of increase of the securities market is in the proportion of the square root of five towards the previous carrier. This it has produced a source of confusion between the contemporary analysts when they have tried to force the data of the securities market within the spiral of Fibonacci. Since the gold spiral closely is correlated to the square root of five, like shown in Figure 4.4.b, it hardly supplies giust' "flattery" for the analysts to down continue their search until the mistaken distance. One good example was given in Lesson III, **The INCREASE MODELS**, where the Gold Section was used in order to determine successive coils on the spiral. However, one more careful look to Diagram III.B extension that this carrier was currently the diagonal of two squares, that it defines the relation of the five root.

The spiral of increase with the square root of five is shown in G Figure.1. Everyone of the triangles shown in this figure is similar and has sides in the proportion of the five root. The inner angles are given from the relations:

TAN^{-1} (2,236) = 65,9°

TAN^{-1} (0,447) = 24,1°



G Figure.1

Spiral of increase of the square root of five.

EXAMPLES IN THE SECURITIES MARKET OF THE ROOT OF FIVE IN THE INCREASE SPIRAL

The G Figure.2 extension the PTV that combine the greater points of reversal in the DJIA between 12/1914 and 6/1942. I cate to you horizontal and vertical of these triangles they are the members time and price of every PTV, whose given they are contained in Table 4.2. These triangles represent successive coils in the spiral of increase of the square root of five. If the triangle from 9/1929 to 7/1932 were ruotato 90° and every cateto multiplied for the square root of five, the triangle from 12/1914 to 9/1929 would have to be formed like follows:

Triangle ABO Triangle JAO

9/1929 - 7/1932 12/1914 - 9/1929

AO = 345 POINTS x √ 5 = JO = 769 WEEKS

BO = 148 WEEKS x √ 5 = AO = 333 POINTS

AB = 375 POINTS x √ 5 = JA = 838

These two triangles introduce a good example that demonstrates to the intimate logon between the price and the time. Since they are successive coils on the increase spiral, these triangles are ruotati 90° from every other. Therefore,

The PROPORTION Of the ROOT OF FIVE BETWEEN The TWO E' TRIANGLES From the PRICE In The FIRST TRIANGLE To the TIME In ACCORDING TO TRIANGLE, And From the TIME In The FIRST TRIANGLE To the PRICE In ACCORDING TO TRIANGLE.

That is, the decrease from 9/1929 lessened in the 7/1932 lasted 148 weeks. And the rise from the minimum after the reopening of the market in the 12/1914 to the maximum of the 9/1929 was of 333 points, that the decrease of 148 weeks from the 9/1929 to the 7/1932 is the square root of five times.

Similarly, the decrease from the 9/1929 to the 7/1932 was 345 points. And the increase from the 12/1914 to the 9/1929 lasted 769 weeks, that it is the square root of five times

the 345 points of decrease from the 9/1929 to the 7/1932.
The angles within the triangles in G Figure.2 are calculate to you in G Table.1. If the angles form between the vertical axis of the price and the two PTV to you in the G Figures.2.to and G.2.b they are added together the result is a nearly perfect angle of 90°. That is,

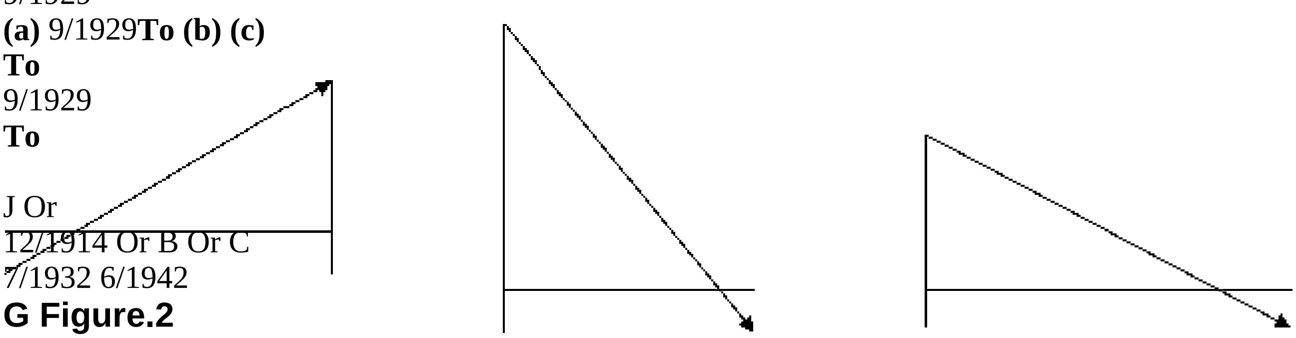
JAO = 66,59° +
BAO = 23,27° =
JAB = 89,86°

In other words, the two PTV that define the action of the securities market from the 12/1914 to the maximum in the 9/1929 and from 9/1929 the lessened one of the depression in the 7/1932 are to an angle resisted towards every other and in proportion of the square root of five, forming effectively a rectangle to root of five with sides of 838 and 375.
It observes that the triangle with root of five from the 9/1929 to the 6/1942, shown in G Figure.2.c, is overlapped to the triangle to root of five in the G Figure.2.b. This because PTV 9/1929 - 7/1932 are not same the slowly bidimensional one like the triangle in the G Figure.2.c.

In conclusion, the analysts must have better turn out to you if reindirizzassero their efforts from the relationships of Fibonacci and towards those products from the square root of five far away.

G Table.1
Angles of the PTV in G Figure.2 relati you to the aces price and time
(the values of price and time in the median column are from Table 4.2)

ANGLE IN FIGURE G.2	SIDE OPPOSITE/ADJACENT SIDE	TAN^{-1} OF OPPOSITE/ADJACENT FROM THE PREVIOUS COLUMN
AJO in G Figure.2.to	333 Points = 0,43 769 Settim.	TAN^{-1} (0,43) = 23,27°
JAO in G Figure.2.to	769 Settim. = 2,31 333 Points	TAN^{-1}(2,31) = 66,59°
BAO in G Figure.2.b	148 Settim. = 0,43 345 Points	TAN^{-1} (0,43) = 23,27°
ABO in G Figure.2.b	345 Points = 2,33 148 Settim.	TAN^{-1} (2,33) = 66,78°
CAO in G Figure.2.c	659 Settim. = 2,25 293 Points	TAN^{-1} (2,25) = 66,03°
ACO in G Figure.2.c	293 Points = 0,44 659 Settim.	TAN^{-1} (0,44) = 23,75°



G Figure.2
Similar triangles form to you from the PTV between 1914 - 1942.