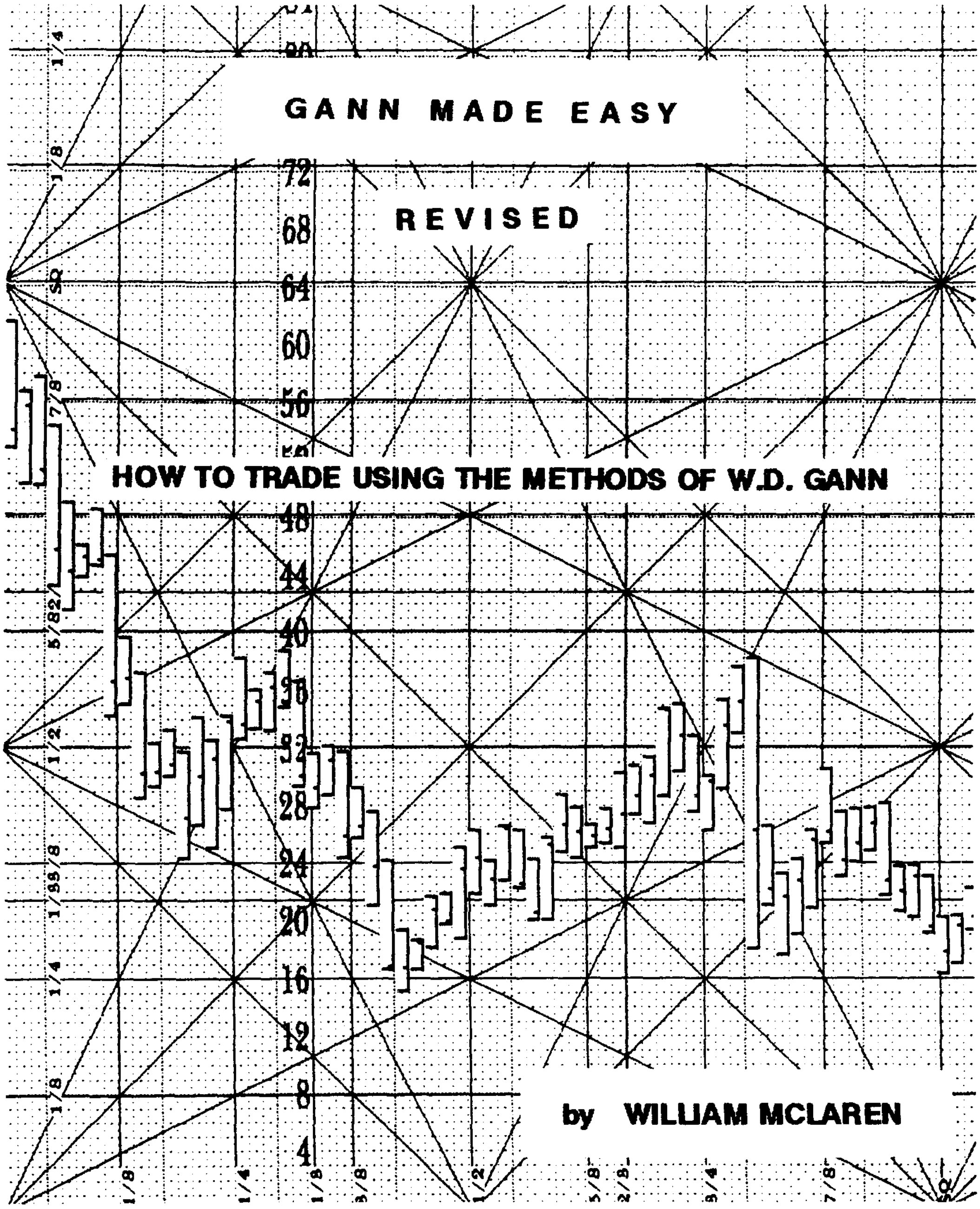
GANN MADE EASY

REVISED

HOW TO TRADE USING THE METHODS OF W.D. GANN



by WILLIAM MCLAREN

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INTRODUCTION

In the years since W.D. Gann's career ended, many people have attempted to duplicate the prediction and trading capabilities which he became known for. Gann used many techniques, some of which are simple and easy to understand, while others are more obscure. What becomes apparent from a quick overview of the man's history is that he did a prodigious amount of work. His papers, accumulated over a lifetime of study, filled an entire moving van when they were purchased by Billy Jones. From this one fact, it can be said that there was no single technique which produced the results that Gann used in his trading.

Today you can find many individuals who claim to have found one simple key that was the cornerstone of all of the predictive work which Mr. Gann accomplished. But the "secrets of Gann" are many numerous faucets of the man's work, and no one, without the support of others, works accurately and well all of the time. If your reason for reading this book is to find that one secret, possibly the "magic square", or the Jupiter - Saturn aspect, which gives you a perfect trade every time, then you will be disappointed. The purpose of this book is to give you a grasp of the charting techniques and knowledge of time which Gann, and others since him, have used successfully in determining key dates and price levels in the future. Also, I want to give you enough knowledge to be successful in your own trading. The method presented herein, if used properly, is very accurate in predicting months, weeks, days, and even the five minute period into the future which will change the direction of the price movement in a stock or market.

In my fifteen years of study of the man's work, I have discovered simple techniques that, in and of themselves, are valuable predictive tools, and have combined these tools in to a system of analysis that produces tradable results. This is a middle ground in Gann's work, not a single tool, and not so many tools that it becomes confusing. The premise which resulted in this method was "find out what works, when to apply it, and then use it".

I hope you will use the simple methods in your work, those with a minimum amount of effort. You will have to devote time to this method, but those times and prices which are apparent from drawing the angles, using the cyclical counts and doing the basic mathematical calculations, will give you the information you need to trade. Do not attempt to use all of the methods for every trade, to find every of division every range, or every high, for you will find that you have too much information and it will become confusing. I struggled through this originally. When I was using every technique, I found that I had too much information, too many squares, too many counts to make a decision. Over the years, I have sifted through the individual methods, isolating the ones which I know I can trade from.

Realize that the information which comes from these techniques is only useful when one has a knowledge of how and when they work. Certainly there are many things to know, and there are many things to consider, but the main thrust is to keep the work simple. Don't push yourself to prove a turning point in time, merely because you want it to be there. If your simple methods presented herein, do not show it, don't trade it. The trade may be there, but why force it when you can find a trade easier in another stock or market?

Edison said that genius was one percent inspiration and ninety nine percent perspiration, and you will have to work to make this method a success. It requires a good deal of time, to establish trading charts and keep them up to date, but, work reveals the reward. The methods explained in this book are put to use in the middle and latter chapters, in combination with the separate package of charts. Therefore, you can see how the tools come together to give you excellent trading opportunities.

I urge you to try this method on any stock or commodity. I am giving you the necessary information to start your work, but you will not know that it works, or realize how it works until you use the methods yourself.

Take the time to bring a chart up to date, then find the turning points in the past, and find the ones in the future, and you will see the method. There is no better way to prove this to yourself than by using it. In my case it took years of work on hundreds of charts to find the applications of specific rules. I would expect that it will also take you some time, although this book should speed the process. Once you have proven it, you can trade from it. In this text I have attempted to reduce all of Gann's methods down to those which are easy to use and work often. **Keep it simple!** That is the rule.

Why these methods work, I will not attempt to fully explain. Such an attempt would probably do nothing more than confuse. Let me brush that aside by saying that like many things in life, these are excellent tools. You do not have to know how or where a hammer was forged in order to drive a nail. But, if you have an intense desire to know why it works, you are in for years of study.

In my studies of Gann's writing, I have found that he wrote in the same manner as the ancient mystics. This method gives a major premise, and possibly a minor premise, the truth is given, and from that, you have to draw the conclusion. You have to earn the knowledge that is given, as it is not spelled out directly. They wanted you to work for the knowledge. I studied the ancient masters for years, and W.D. Gann wrote as they did. Perhaps, that is why it easy for me to read his work. I knew that he was speaking in syllogisms. He did not give you the conclusion. What he did in the case of the number ninety, or in virtually any of the other cases, was give you an idea similar to, "You can look for top 90 to 99 days after a move starts." That is not 100 percent true, if you take every move in a market or stock, and you look for top, or a change in trend 90 to 99 days after the start of the move, it going to happen only occasionally. But, there are circumstances where it works almost perfectly.

One last point that is very important. The foundation to successful trading is knowledge of price movement and volume- the ability to view a chart and know if there is a probability of a top or bottom- the understanding of "blowoffs" and the opportunities they represent. Therefore, a portion of this text will be devoted to an understanding of price movement.

THE PSYCHOLOGY OF TRADING

MASTERING HOPE, FEAR AND GREED

Generally, when a trader writes about the psychology of trading it is directly from his own experiences in the market. Usually there is other added information from the trader's observations of the actions of other traders. Most, if not all of these perspectives come from personal experience, and they generally repeat in each individual's trading patterns. Mr. Gann's first book, written in 1923 and titled, "Truth of the Ticker" was just such a writing. In this book he emphasized the pitfalls to successful trading which come from human emotions.

I too have gone through most all of the emotions which Gann presented in that 1923 book- hope, fear, greed, the need for patience, and the need for both nerve (or courage) and knowledge.

Trading is in many ways an art rather than a science. The importance of being able to master yourself is far greater than any system of analysis. If you have a systematic approach that finds trading situations which will be right 80 percent of the time, you may still loose money. You have to be able to execute the trade, and this is where many traders go wrong. Many either wait too long, which is a problem with courage or fear. Or they don't have the patience to wait until the time is right, and enter the trade to early. The most important part of trading the markets is mastering yourself.

Gann said that you must be prepared for hope, fear, and greed, and you must be aware of when you are trading from a basis of these emotions.

Successful trading requires virtually every trader to change certain habits and attitudes. In most cases, identifying and changing these attitudes is a difficult proposition. What makes you successful in business and life is different than what makes you successful in trading. In normal situations success comes from being able to control circumstances, subordinates, machines and so forth. You make decisions, stick by them, make plans work and manage your subordinates. Control is what helps make you successful. If you make decisions and you don't play out the plan, you loose. But the market is different in that you cannot control the market. You may find yourself trying to control it with expectations, and this will lead to trouble.

As you cannot control the market, you must flow with it. You will probably find, if you have not found this already, that you have to change yourself to trade successfully. The reasons for this are numerous, and as I am not a psychologist, I can only touch upon them. It seems that many things that a person naturally matures with, and learns from years outside of the markets, do not apply to the markets. Everyone, I do not care who they are, or what they've done, has to change in some way to become a successful trader. It just doesn't come naturally.

Of the mistakes that traders make, emotion can be one of the greatest. Greed, the desire to gain more than a position will naturally give is one of these problem areas. Greed can cause one to overstay a profitable position. You may find yourself thinking, "If it just moves three more points I've got a 100 percent profit". When you find yourself thinking in this fashion, or routing - cheering for a marker which is moving your direction, be careful. A second effect greed has upon many traders is to cause them to over position, or take a larger position in a trade than should be taken if good money management is being used. When you put more into that position than you know you can afford, you may find yourself in a panic to get out of what could otherwise be a profitable trade.

You should plan your trading in such a fashion as to keep yourself out of stressful situation. If your normal position is ten percent of your trading account and you see that great trade coming up, and you put in fifty percent of your money, you will probably panic if the trade starts to move against you. You may close out such a trade before your plan is complete, before your protective stop is hit, only to find you have sold out of a long position at the low of a counter trend movement, or out of a short position at the intra day high and that your plan you devised while the markets were not trading was correct after all. It is one thing to be certain that a trade is a good trade and take a position, but it is another thing, entirely, to be greedy and over position in that trade. If your wrong, you will loose too much, and if your trade is correct, you will find yourself constantly concerned with it and probably loose sight of the original plan. Some individuals can manage themselves well in this type of situation, but this is not the norm. If you find that you are concerned with a trade to the point of not being able to sleep, or thinking of that one position constantly, greed is a problem. Over positioning, or investing too much capital in a trade, can be a trader's worst mistake.

Hope, or expectations, will also manifest itself in such a fashion as to foil as excellent trading plan. If you buy a security in the hope that it will go up in price and you will profit, with no method or evidence, or buy on a "tip", what you might think is a bit of inside knowledge, then you have entered the market on the wrong basis. Remember, when hope is the basis for investment strategy- beware. Reason and evidence should be the basis for trading. A second effect of hope is when a position moves against you and you have not used a protective stop. In this situation you may find yourself hoping that the price moves back, replacing action with hope.

Fear is another problem that must be conquered. I believe most psychological problems are fear based. Fear of missing the move will cause you to position early and likely stopped out at the point you should be getting positioned. It can cause you to trade out of a long position near the low, or exit a short position near the high. On the other hand, a healthy fear of the market can help you trade by a plan. Gann said that a fear of the market was the first sign of a successful trader. On the other hand, you must not fear taking a loss. Respect of the market helps to give you the discipline to trade only when you have the right plan and circumstance. But, fear of taking a loss will often result in the failure to take a trade. So, here you have to develop a balance which gives you a respect of the market, so that you trade from evidence and a plan, and courage to take that trade when the time is right.

Most traders run into a problem when they make a losing trade. When you make that losing trade and you take the loss, and you don't become emotional about it, then you are doing well. But if you make that losing trade, (which is inevitable), and you punish yourself, or feel bad, or start looking at your checkbook, etcetera, then you probably had better take some time to assess your situation.

Plan to keep yourself out of trouble. Do not involve your self esteem in your trading. Try not to tell people what you are trading and why, because this will involve your self esteem, and you will find hope coming into your mind. Try not to make predictions of events from your work. Of course with this work, you will find it hard to not do that, but if you avoid telling people what you feel will happen in the market, you will avoid expectations in your trading. If you have made a certain prediction, your expectations of that happening will increase. You will want it to happen. Hope becomes involved again, and this will muddle your thinking. By keeping your thoughts to yourself, your self esteem is not involved, and you will not have to fight that psychological problem. Do your best to avoid the emotional problems that trading can bring on.

You will know that you have reached a point of being psychologically able to trade, when you can make a plan and not change it. When you can watch the market move against you, with your plan in action- your stop in the market, and not have the desire to get out before the market hits it, you are ready. You should make your plan when you are not emotionally involved in the market. When the market starts to gyrate, if you have the urge to change your plan and you don't, then you are ready.

There is a cycle that many traders go through. Often, a trader will start out with a reasonable plan. He uses good money management and doesn't expect more from a trade than it will reasonably give him. He starts to make money, only trading what he should trade, and when he should trade it. He has respect for the market, but no fear of taking a loss, or of trading from good evidence when the time is right. He begins by doing well, making money, catching some good moves in the stocks or options or commodities, and he starts to feel as if he is a pretty good trader.

At one time or another, this trader looses his respect of the market. He begins to overposition and loose sight of the original plan. He starts loosening up on stops, and avoiding plans, possibly even ignoring his work on the market because now he is certain that he is right. The losses start to catch up with this trader, and possibly at one time or another, he gives back all of the money he had made previously. Now, he starts over again, with a greater respect for the market. He goes back and assumes the original plan and the cycle is completed.

Of all of the valid times to trade that I will give you in this book, and those that you know or will learn for yourself over time, should there come a time when you that you are not using them, but are trading just to trade, watch out. The market will have your money. When trading seems suddenly to be so easy, where before it seemed so hard, take a good look. It is not easy, and you must do the work. Maintaining the plan, and having the patience to wait for the setup to trade from is essential to making money in the market.

From our earliest days we are taught that to be wrong, wrong in school, wrong our judgement of any situation, is undesirable-bad. The idea that being wrong is bad, which most people carry with them forever, must not stop you from admitting that you are wrong in trading. Being wrong in trading means taking a loss, admitting defeat. We are taught in our youth that to be wrong is not acceptable, but in the trading business, we are going to be wrong. Plan for it. Take the loss when you are wrong and make it unemotional. When you can take a loss and it is unemotional, then you have reached the stage where you can trade successfully.

One more problem that is caused by the psychology of the individual, is having a bullish or bearish bias. I have analyzed my own trading record for this and discovered that I have a three to one tendency towards short trades. You may have a similar tendency, or one towards long positions, but it is important that you realize your own tendency. In a bull market, my bearishness works against me, while in a bear market, it works for me. This is just one more reason that I have found to trade from evidence and a plan rather than feelings about the market or stock.

The psychology of trading is an exceptionally important part of the business, and is something that you should always be aware of. Hope, fear, and greed, are major factors, and must be conquered. Expectations are part of hope, and I would like to say something about expectations.

If I told you that this was a book on how to play golf, and that after reading this book, you could expect to go out on the pro tour and make a living, what would you think? You would know that you would have to put in a lot of practice, you would have to play tournaments, and, if you have ever played golf for money, you know that you can choke on a two foot put. It is a game of mastering performance under pressure. It is psychology, as well as, knowledge, skill and practice. The same is true of trading.

In this book I am going to present you with tools, with setups or situations that are tradable. If you follow the method, taking only trades which are based on the setups, and use a good trading plan you may well achieve eighty percent accuracy in your trading. You will see these situations or set-ups over and over again in the market, and if you are patient, you will make good trades from them. Part of what we will do in this book is to look at these situations on numerous stocks. You will see the reactions are predictable, which will give you the confidence to trade.

DISCIPLINE AND PROTECTIVE STOPS

In his last book, "45 Years on Wall Street", which Gann wrote in 1949, at the age of 72. He emphasized the same points of trading and psychology as in his first, but he placed added emphasis upon what he obviously felt were the most important ideas. He said first, and most important, was to place a stop loss order at the same time as you place a trade, and to never cancel it. If you experienced a conversation with your broker concerning whether or not to take that small loss, you know that this is a difficult decision to make during that time, so you must make that decision beforehand. Gann also emphasized that over-trading, or trying to position in too many trades was a problem that he dealt with personally.

You must look at trading the market as if it is a business, However, you must be aware that this business is different than any other business. Trading is a business in which losses are inevitable, and there is nothing wrong with taking a loss. Other businesses, in which you can control events to some extent, lead to situations where losses indicate failure. Trading, makes losses part of the business because you cannot control events in the market. There is nothing wrong with them, and taking a small loss in an unemotional way actually is a success in this business, although, it is not the type of success you want to have often.

In a normal situation, you wouldn't go into a business saying, "I'm going to take some losses in this business." If you did this, you would probably not enter the business to begin with. This type of thought is just not in your mind. But when you go into the business of trading, you have to accept that losses are part of the business, and you have to learn to live with that. Not learning to live with losses, and not examining why they occur, will cause the failure of your business of trading.

Being able to gracefully admit that you have a loss and allow the protective stop (which is part of your original trading plan) to take you out of that position is an important part of successful trading. Don't punish yourself for this type of trade, just take the loss, and remember that staying with the losing position is another form of punishment. When you have a loss, go back and analyze it. Ask yourself, " What mistake did I make, why did I take this loss?" Understand it as best you can. It may be an error in judgement of information, or it may well be because of an outside influence of situation. Once you are reasonably certain of why the loss occurred, you can put it aside, and hopefully avoid a similar loss in the future. Approach it logically, not emotionally.

When you are about to put on a trade search your mind and see what thoughts are dominate, see if its fear of a loss (living in the past) or very high expectations of profits (living in the future). Remember, the only thought that should be in your mind is now,' the present. Fear from the past or expectations about the future and not real. Only this position and the present are real.

Always remember that eighty percent of this business is psychological. It is an art of mastering your self. The psychology is more important that anything else I will present in this book. You must learn how to master your self, conquer or control all of the problems that you are going to face. I've been aware of those problems that you are going to face. I've been aware of those problems for ten years, and I'm still trying to conquer them. It's a lifetime endeavor. You have to understand what is inside of you and cope with that all the time.

Two types of capital are involved in trading, money capital, and psychological capital. If you loose your psychological capital you are bound to loose your monetary capital. Learn to recognize the effects of fatigue. You must be in good health and have few outside pressures. If you get a letter from the IRS that says, "We're going to audit you next week," don't trade the market.

Trading is decision making. Decision making is stressful, and you must plan to avoid other stresses. If you don't make clear headed decisions, the market will take your money away. Just as you use a stop loss in the market to protect your capital, use a stop loss to protect your psychological capital. When you feel that you are tired, or stressed, searching for trades that are not there, step back from the situation for awhile.

Finally, Gann emphasized that knowledge, in and of itself, is very important and that you can never have too much of it.

PARTIAL POSITIONING

This section on partial positioning could have been included into almost any chapter in this book. I included it in this chapter dealing with psychology because of the initial reason I decided to trade with partial positions. It was for personal, psychological reasons- an attempt to overcome an inability to stay with positions for more of the trend and thus much larger profits. This is always a continual problem as you must learn to take a profit while it is still there. Every hit is not going to be a home run. Always start with a full position. For purposes of illustration, we'll use 10 contracts as our position and a half hour chart as the primary focus of our analysis. If I were trading the S & P contract and went long, the first thrust in my direction, I would sell 1/4 to 1/3 of this position. I've found the mimimum movement on the half hour chart to be 1 1/2 points. I, then, have an option to move my protective stop a little closer and lose some of the fear of a loss or, at least have my transaction cost paid. Then, through analysis, there will be a resistance level that is obvious and I would liquidate another 1/4 or 1/3 of the position. This now leaves me with a guaranteed profit on the position, and I can now move the protective stop to a point below what would be a counter trend move, if the trend were up. I could possibly look to add back some contracts after a successful test of that level. This will become a little easier to understand when exact examples are given later in the book. Personally I found it much easier to stay with a trade once I have taken some profit out. Also, eight years ago I reviewed my trading and found I had many break even or small loss trades that were profitable right from that start. Since changing my positioning strategy to trading partial positions, most of those trades are now 10 to 20 per cent profits. Over a few years, that can amount to a great deal of money, and as you will find using an intra-day chart there are a great many trades you will find that will be difficult to qualify the magnitude of the movement.

HOW MARKETS MOVE

In order to become a good trader you should develop an understanding of the manner in which markets or individual securities move in price through time. Study of charts, and the normal moves in the market, will increase your awareness of what is likely to happen under any given circumstance. Being able to recognize "blowoff movements" is critical to success. Recognition of patterns of movement in the market is important to success in the market, and with this in mind, you should obtain charts and books which describe the normal market movements. Study them closely. An excellent and longstanding text, Edwards and McGee's book, "Technical Analysis of Stock Trends," as well as, "The Elliott Wave Principle" by Frost and Prechter, should be included in your library for your understanding of market movements. H.M. Gartley's text, "Profits in the Stock Market", is also recommended, as is, Wyckoff's exceptional work on volume analysis. I am going to devote portions of this text to price movement. Understanding price movement is the **FOUNDATION** to successful trading and all else is built upon this knowledge.

FOUR INVESTMENT STRATEGIES

All markets go through four phases. They are topping formations, bottoming formations, and bull and bear campaigns. You should have four strategies in your trading or technical arsenal. One for bull campaigns, which includes an understanding of countertrend movements, both in price and time. Another strategy for topping patterns with an understanding of "blowoff" patterns, including both price and time. Third, a strategy for bear campaigns which includes an understanding of countertrend movements and how those differ from the countertrends of bull campaigns. And finally, a strategy for trading the possibility of a bottom formation.

The bull market strategy goes into effect when you have determined that a bottom has taken place, and the trend is changing to up. The bull strategy is to take long term positions in stocks which are showing strength already, using reasonably long term protective stops developed from your knowledge of countertrend movements. These stocks can be identified by their price movement, and should be making higher lows while the market is making lower lows with a loss of downward momentum. While this strategy is in effect, you will be looking for an indication of a change in trend. Knowing that the first indication, possibly a loss of momentum on the daily chart, is an indication that a consolidation or countertrend movement is about to begin and not a change in trend from bull to bear. This is a point where your knowledge of countertrend movements, in both price and time analysis is critical.

When the trend begins to change from bull to consolidation, you should put into effect a consolidation trading strategy. If time is early in the trend, you may look to buy other stocks or commodities and take advantage of the continual rotation from one group to another, that occurs in trends. If time is early in the bull trend, you would try to stay with your good positions and not give them up during a consolidation. A normal consolidation will last three to four weeks. Illustration number 2.1 shows typical consolidations in a "blue chip" stock, IBM.

Eventually, one of the consolidations will show the signs of being a top (some of these signs are discussed later). When this occurs, you will shift from the consolidation trading strategy to looking towards the bear trend strategy of selling rallies or breakouts to new highs, and taking longer term short positions. Once the trend is established, you may take intermediate term option positions.

Obviously this is an idealized trading strategy or outline. You will seldom be certain of any situation, you will only have evidence which leads you to believe that certain cases are true (in the markets you deal with probabilities, not certainties). However, the base strategy given above is a good plan to follow. So, let's go on to a general description of what to look for in the markets.

When a move takes place in a stock, index or commodity, the majority of the move in price will generally occur in time periods of three- three months, three weeks, three days. You will see multiples of three occurring in trending situations. You will find the average rally in a bear campaign is three weeks followed by a resumption of the bear trend. This is true of a bull trend also, the average sell off is three weeks, then followed by a resumption of the trend. There are times when these countertrend moves can last three months for an intermediate term correction. If you understand countertrend movements, the price and time probabilities, you will be very successful trading the markets. This will be covered later in the text, but you should be aware of the importance of this subject.

Of course, this discussion so far has been general and simplistic. But you should understand, that even a day trader should look first at a broad strategy based upon what is probable for the month, then week, then day and finally intra-day.

Once you have a strategy in place, and you are using it to trade a certain type of market, you should have, or develop, a well defined set of criteria which will cause you to change strategies. If you don't have a strategy well defined, and available, your actions may be motivated by your emotions of hope, fear and greed. Rather than good hard evidence, and the daily movements in price may overwhelm your trading judgment.

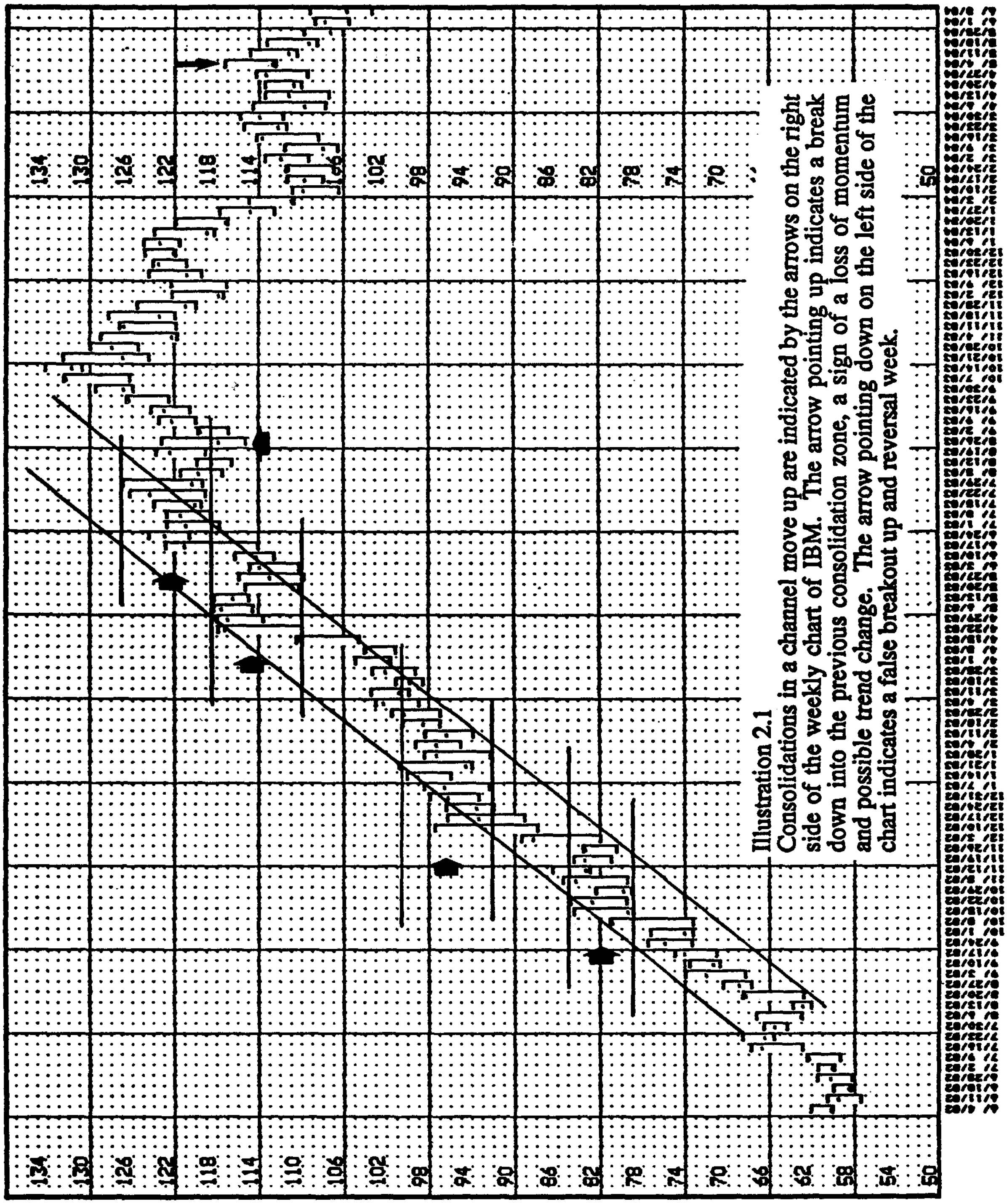


Illustration 2.1
Consolidations in a channel move up are indicated by the arrows on the right side of the weekly chart of IBM. The arrow pointing up indicates a break down into the previous consolidation zone, a sign of a loss of momentum and possible trend change. The arrow pointing down on the left side of the chart indicates a false breakout up and reversal week.

You will be wise to develop an extensive understanding of these four stages of movement. I've found it very helpful to keep file folders for each. These are filed with chart examples, and are continually being expanded.

TOPS, BOTTOMS AND CONSOLIDATIONS

Tops in the broad market take time to form. It is a rare situation when a top in the market comes in without a test of the high in the topping formation or a marginal new high above a series of previous highs. Individual stocks will rotate into tops. Some will reach top in advance of the overall market top, and others will find their highs after the general market. Because of this, you should not let the price action in the indexes influence trading decisions on individual stocks. When time has expired for a bull trend, months may pass before a bear trend sets in. In these months you may see large, volatile sideways movements which eventually for the top.

Some stocks will top before the market, and some after. During a topping situation you should look a bit more in earnest at the short side of the market, in individual stocks, than you had during the up trend leading into the time period of top. This can be done in two ways. You can look to pick the exact top in stocks which are moving up. This may mean that your first attempt will fail and you may have to look for a second attempt, although with the Gann cycle analysis you should be able to identify the time period for high within three days with consistency. A second method is to sell against resistance, or at a lower high on those stocks already in down trends. This is obviously safer. These safer points to sell will be obvious once you develop and understanding countertrends.

One of the characteristics of a stock market, or commodity market, top is extremes- in price movement and optimism. There will be groups of stocks that will move five percent in a day and correct only one to three days while in their final move up. These are termed "blow off" moves. An understanding of blow off moves present huge opportunities and that knowledge can save you some large losses. The last week of a top in the market will usually be punctuated with extreme speculations and many over the counter stocks jumping 20 percent in a day or two. Obviously, you do not want to short early in the final stages of a market top, and you should be aware to search out possible blow off candidates when you believe a top is near.

Bottoms will, many times, show the same degree of pessimism. The rally in the final drive down will not be large enough to let anyone out and will finally capitulate into low. Spike lows are more common that spike tops for the indexes. The time cycles for this type of low should be obvious.

Indications of the divergences you will see at tops are many, but you should not use them as a timing method in your trading.

These indications will show up as a failure of the broader indexes to confirm new highs in the narrower indexes as the Value Line to the Dow Jones Industrials. The number of stocks advancing, versus those declining, will usually not confirm a new high if a top is setting up. The number of new highs being made will show a loss of momentum, and, within a few weeks, the new low list will exceed the new highs. Look for very large volume with little price advance. All of these signs are that of a top, but they are not signs of an immediate correction. Again the time cycles are the most important factor.

Once again, tops in the market generally take many months to form. A minimum of three months of sideways action is needed to allow for distribution before a true bear trend begins. The market will be in a strong position on the monthly and weekly charts, but for the first time price will show some deterioration on a daily chart. So, your strategy will change, as you assume a topping formation. You will be looking for two or three week moves up and down, with the market edging a little higher on rallies, but unable to hold the new highs. From a trading perspective you will have significant opportunities. First to buy the horizontal support and sell or short the upper horizontal resistance. I usually assume three tests of each.

From time to time, unusual occurrences will present themselves in the market. The spike top is one of these. The form for a spike top in the market, which is seldom seen, (the market almost always take time for distribution at a top), is a move up for a good length of time and then start a long sideways move. Instead of breaking down out of that sideways move (which you will assume to be distribution and a top), the market will give a forty five or ninety day move up to higher highs. This happened in 1929 and in more recent history at the August 1987 high.

Although it rarely happens, when you see this in the market, you should be prepared to position against the move with only a matter of days for distribution. The distribution took place during the previous sideways price action. This only happens after a long bull trend. Normally a market will not come down without the price moving sideways for some time. If you look at the Dow monthly charts, you will see that the tops take many months to form.

By knowing that a significant top in the market will take a long time to form, and how markets move in general, you will not get bearish from sharp multi-day sell offs in the middle of trends.

Upon completing this book you should have a thorough understanding of the first countertrend move after a change in trend. This should give you the confidence to know that if you miss the top you will still be able to trade the trend and, therefore, not have a need to continually attempt to pick tops and bottoms against strong momentum.

PRICE

There are techniques you can use to find times and prices at which the market, stocks or commodities may top or bottom. These techniques will be exact to the day and within a very small price difference from projections. But you cannot assume them to perform accurately at all times, and protective stops are your insurance policy against being wrong. Remember these are probabilities, not certainties.

The following is a brief discussion of those techniques for finding price levels of support and resistance. Later in the text these will be applied to specific circumstances and clear up the questions you will have as to when to apply which technique.

1 One such technique to find a possible top is to draw a trend line from previous swing highs and then to watch for the stock to form a distribution pattern at that level. Illustration number 2.2, is an example of this on one stock. Then channel lines or equal distant lines from trend lines. Illustration number 2.1, is an example of this technique.

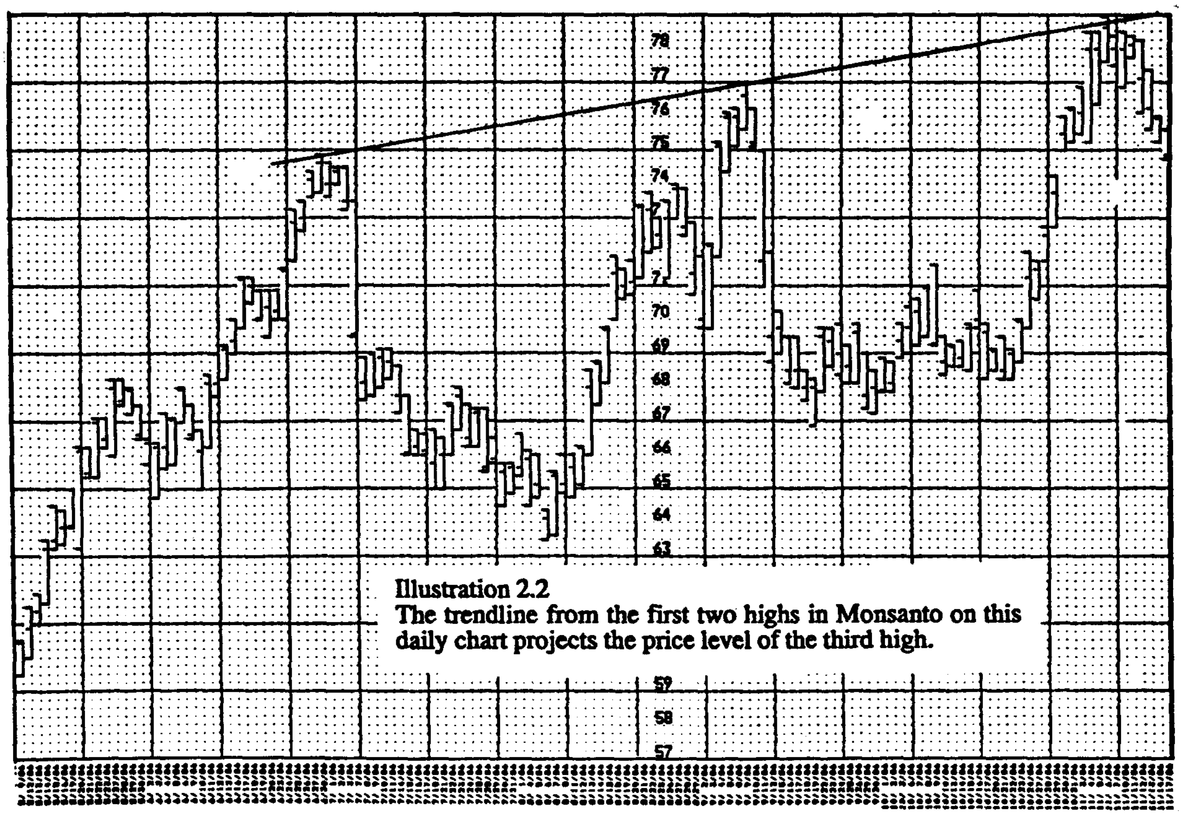


Illustration 2.2
The trendline from the first two highs in Monsanto on this daily chart projects the price level of the third high.

One of the methods which Gann used in his work was to look for what he called an overbalance of price and time. Simply put, watch for a correction which is greater in both price range and the length of duration in time, than previous corrections in the drive up. This is also valid in down trends. The idea of overbalance also leads to the idea of balance, and you should look for evidence to go with the trend- to buy when price has balanced the previous move down in an up trend. In fact, the highest probability for support in the indexes and stocks is that the corrections in an up trend will all be very close to equal. If you study this simple concept, you will be well rewarded.

Another method for finding price objectives is what is called swing objectives. This method is a simplification of the square of the range, which is discussed in depth later in this book. A swing objective is nothing more than 100 percent of a range of movement added to the high of that range during an up trend, or subtracted from a low during a down trend, which gives possible low prices. A 50 percent swing objective is obviously one half of the range of movement added to the high or subtracted from the low. Three different examples of swing objectives are shown in Illustrations 2.3 through 2.5.

The squares of numbers, and fifty percent of the difference between those squares of numbers, are significant support and resistance levels, but cannot be traded by themselves. The accuracy of these price levels can be quite amazing. For instance the square of 32 (32 X 32) is 1024, and 33 X 33 is 1089. And 50 percent between those numbers is 1056. If you make a table of the squares of numbers, and the 50 percent levels such as this, you can use it to check the highs and lows of the Dow Jones Industrials, as well as, many stocks and commodities. You will see he value of being aware of these numbers. Using the DJIA you will see the 625 low in 1970, the 576 low in 1974, the
1024 high, 729 low, 1089 for high, then 1296 for 1984 high.

The Square of Nine price projections for stocks and indexes are very impressive. I have not done as extensive research in commodities as in stocks and indexes. But, what I have done leads me to believe it may be just as valuable a tool in those markets, also. The Square of Nine will be discussed later in this book.

The squares of highs, lows and ranges offer important analysis for price. These will be discussed later in the text, as will the squares of 52, 90 and 144.

Then there are those obvious levels on a chart which continue to work over and over again. One of these is the first time against the last low before the final high, for example,look at the S&P 500 weekly chart and the July 1988 correction.

You can look for resistance on horizontal angles. These are movements up or down of 11 1/4, 22 1/2, 30, 33 3/4, 36, 39, 45, etcetera. These resistance levels are usually tied to an equal or proportionate time movement as 60 points in 90 days.

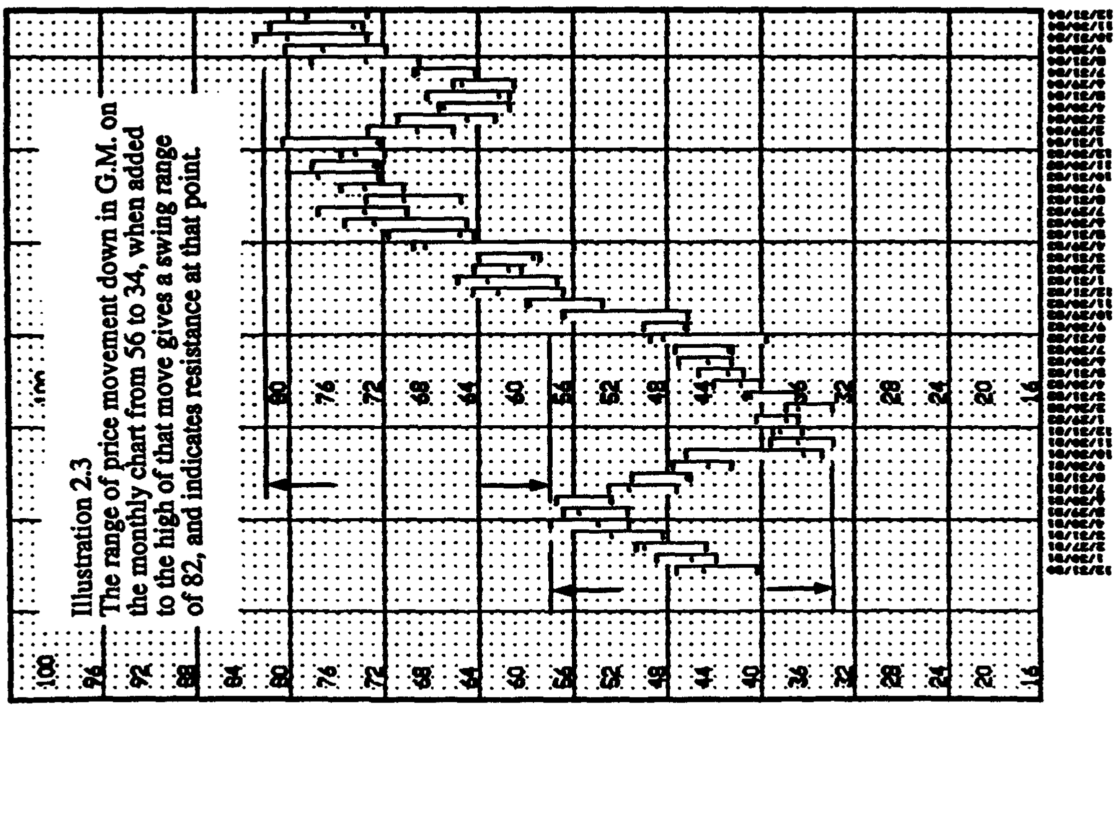


Illustration 2.3
The range of price movement down in G.M. on the monthly chart from 56 to 34, when added to the high of that move gives a swing range of 82, and indicates resistance at that point.

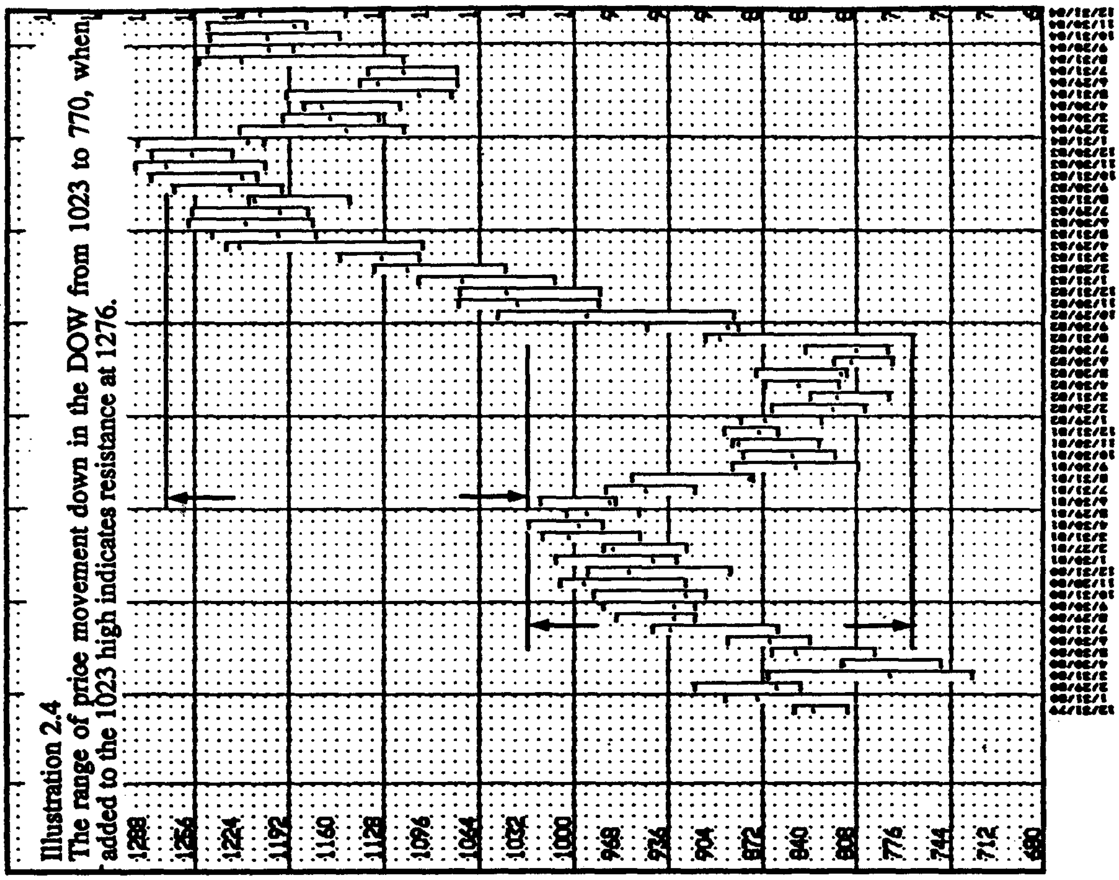


Illustration 2.4
The range of price movement down in the DOW from 1023 to 770, when added to the 1023 high indicates resistance at 1276.

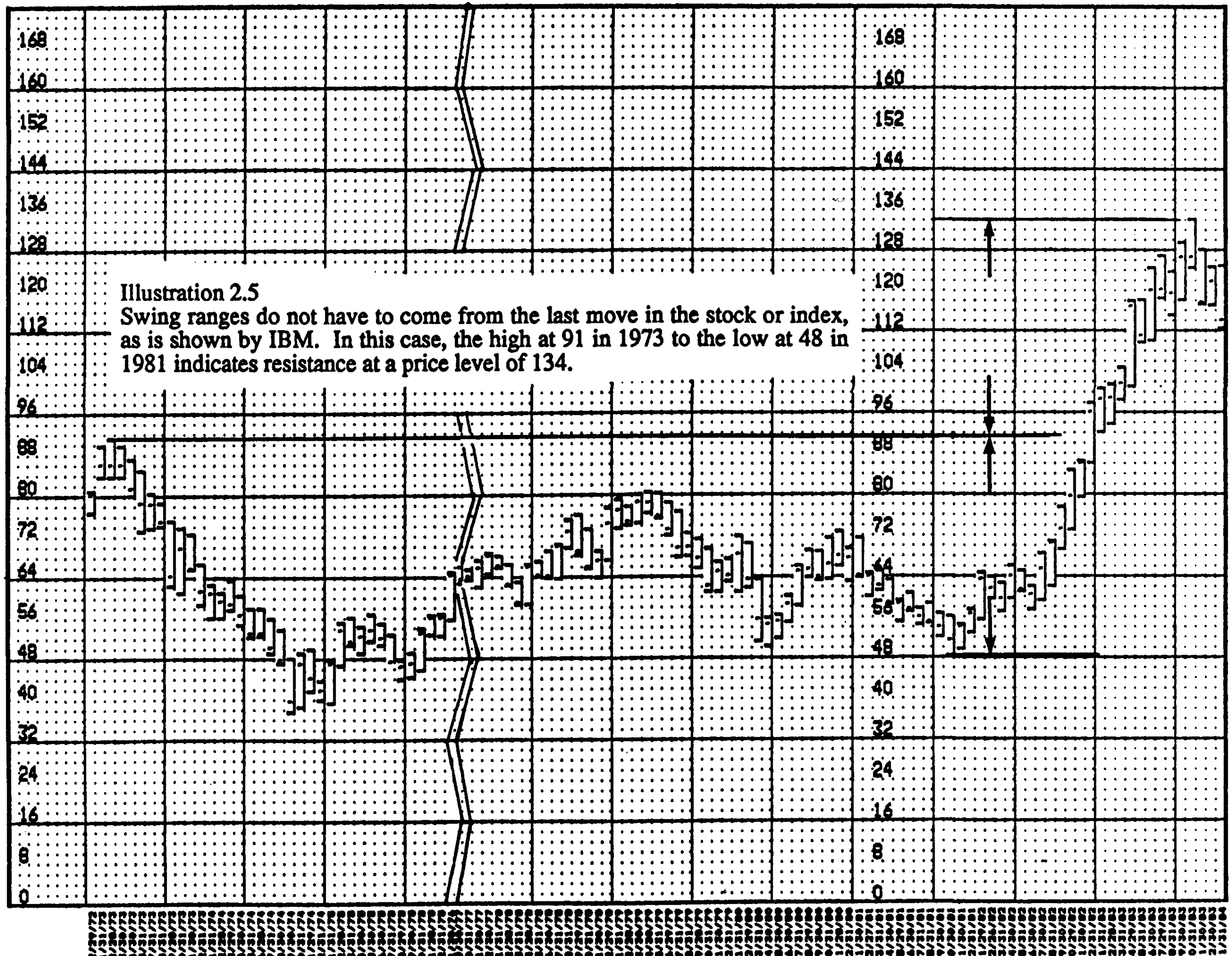


Illustration 2.5
Swing ranges do not have to come from the last move in the stock or index, as is shown by IBM. In this case, the high at 91 in 1973 to the low at 48 in 1981 indicates resistance at a price level of 134.

You can take the square of 90 and put it on the October, 1987 low, and move the square to the right and note where price found resistance and support.

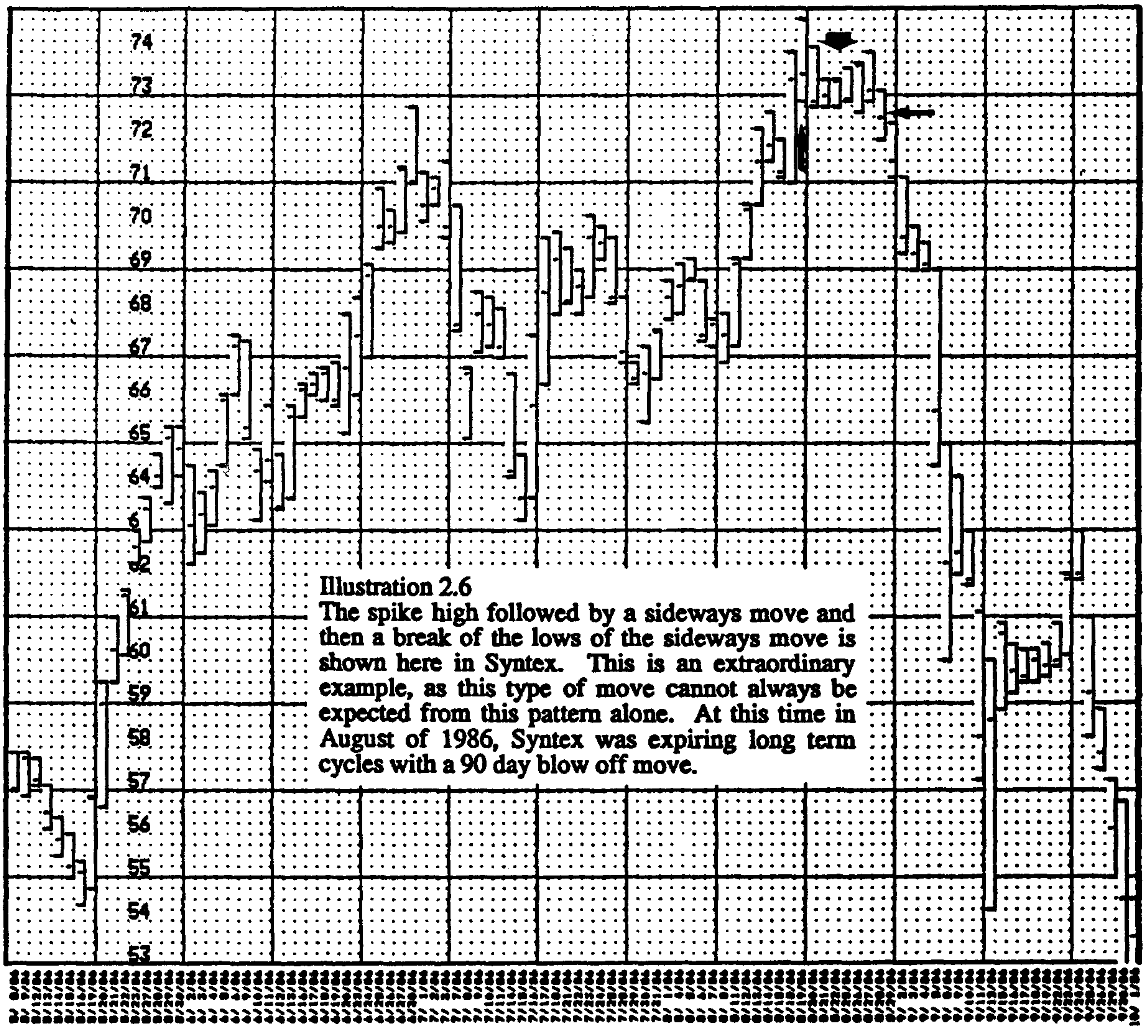
Examples of these horizontal angles (geometric divisions of 360) offering support or resistance, are on most charts. The S&P highs in October, 1989 and January, 1990 at 360 is a case in point. Obviously 360 is a horizontal resistance angle, but when you start to calculate the number of points moved up into that price, it becomes a much more formidable price level. For instance, October, 1987 low at 216 plus 144 is 360. Check October, 1985 or January, 1987 or the final move from June, 1989. If you are still not convinced look at an intra-day chart, and you will see moves of exactly 5 5/8 points and 11 1/4 points.

Gann stated that there were nine mathematical proofs of any point of resistance. The following is an excerpt from Gann's notes:

(1) Angles from tops and bottoms
(2) Angles running horizontally
(3) Vertical angles or time periods ending major or minor cycles
(4) The crossing of important angles starting from "0" at the time of top or the breaking of angles starting from "0" at the time of the bottom
(5) The crossing or coming together of angles from double or triple bottoms or double and triple tops
(6) The crossing of double or triple tops or breaking of double or triple bottoms
(7) Resistance points in the past movement of an individual stock
(8) Volume of sales
(9) Squaring of Time and Price.

He added, " The more confirmations you get at the same point, the stronger the resistance and the safer it is to trade, but never overlook the value of the Time Factor and the Main Forecast."

Occasionally, you will see a chart pattern which unfolds with a high day followed by three or four days of sideways action on less volume, and then a down day with increased volume, in which price closes below the low of the previous sideways move. This pattern is a bearish pattern on both daily and weekly charts, although, a daily pattern such as this cannot be relied upon as much as the weekly pattern. In fact, when you see this on a weekly chart, you should buy puts every time you see those lows of the sideways movement broken, if there are significant time cycles expiring. This pattern will almost always result in a three day move down from the daily charts, and a three week move down on weekly charts. It is considered a setup for trading purposes. Illustration number 2.6 is an example of this type of pattern.



When a bull trend shows high momentum on a move to new highs in the market, as was shown by the 1985 market, this type of momentum is, more often that not, followed by a sideways or consolidation movement. In fact, a consolidation of this type, can be a bullish indication. Look at the October, 1985 to January, 1986 period on the S&P and Value Line weekly charts to see this.

Again, all stocks do not individually move with the market. During consolidations, weak stocks will rally off support, while some will continue lower. Some strong stocks pop up, while others correct. Individual stocks move in a different directions during consolidations. Upon reviewing my file on bear market consolidations, my research indicated the weak stocks will generally not rally until either a test of the first bottom or a higher bottom is made by the market.

While the market is consolidating, the consolidation can be analyzed to see if it has bullish or bearish implications. One method of doing this is to look at the position from the low of the drive up, using Gann's angles in order to determine if the market is in a strong or weak position, and this will be described later in this book. A second method for analyzing the price action within a consolidation, is to use the square of the consolidation range. This can be a very powerful timing tool. Again, the square of the range is described later.

The normal market consolidation tends to be horizontal in nature. This is, also, true of individual stocks. Consolidation moves that tilt upwards tend to be bearish, while those that tilt downward tend to be bullish.

There is a basic rule of thumb that can be applied to consolidation top and bottom zones. The third move against those zones is the most important move. A failure on that third attempt to go through either the top or bottom, will usually result in a fast move in the other direction. This will appear as a triple top or bottom on your charts. And the fourth move, or attempt, will usually break through that consolidation zone and be the start of a fast directional move. To see the validity of the fourth move against a zone, you should check as many charts as you can, and look for quadruple tops and bottoms. These are very rare.

Once a top and bottom for a consolidation are established, you can use a consolidation trading strategy. With a high established, the market or stock will move down to either the previous swing high or old top, or a division of the range which it created while moving up. Ranges will be discussed later in this book. Once support is established, then the market will move up to the top that has been established for that consolidation. When you are reasonably certain that the market or stock is in a continuing consolidation movement, you should look to sell at, or slightly above, the old tops, and buy at old bottoms, standing aside until a good setup comes.

A setup to look for during a sideways movement, and one which indicates distribution has run it's course, is a false breakout, or a move above a sideways zone that fails to extend the move during the next week. A good rule of thumb to judge whether a breakout move is false, is the movement should not go three points above the old high. This is general, and applies to stocks in the medium price range, say from $50 to $100 per share. Very fast moves result from false breakouts and false breakdowns. Significant changes in trend will often occur from those points. You'll notice most of these false moves will be punctuated with reversal weeks. Illustration 2.1 shows a false breakout in IBM during the week of 5/4/84.

Generally a false breakout up, or false breakdown will start with the type of momentum that appears to be strong move in price (in that direction), then no further momentum develops, and price reverses the following week. When this general knowledge of false moves is used in conjunction with price and time analysis from the Gann techniques, it makes good, confirming evidence that a major top or bottom may have been found.

Another technique or chart pattern I watch for during consolidations is when a stock or index trades in the same range three or, preferably four days in a row, and the highs and lows are within 1/4 to 3/8 of a point. I call this type of action a nesting formation, and have found this very useful in trading.
A breakout from that nest will usually yield a fast three day move, and more often that not, the beginning of a multi-week movement.

You can, also, look for the first rally from a consolidation bottom to yield a good correction down. This is caused by stock holders who have long term gains, and who did not sell at the first top in the consolidation- taking the rally as a second opportunity to sell. The next low from that second top should be judged to see if the market appears sold out. One good indication of this would be a few small volume down days followed by a large volume up day, with a higher low and a higher high. The reverse of this is true at tops of consolidations.

SECTIONS OF MARKET CAMPAIGNS

There is a text of knowledge currently referred to as wave analysis or Elliott Wave. Mr Gann explains this as sections of a campaign. The following is Gann's analysis of this subject.

"A Bull or Bear Campaign in stocks on the averages runs out in 3 to 4 sections-

BULL MARKET

1st Section- Advance after final bottom; then a secondary reaction.

2nd Section- Advance to higher levels, above the highs of previous week and of the first advance; then a reaction.

3rd Section- Advance to new high for the move. In many cases this means the end of the campaign, but you must watch for a definite indication before deciding that the 3rd run up means a change in the main trend.

4th Section- Often four sections are run out and this 4th move or run up is the most important to watch for the end of a Bull Campaign and a change in trend."

"Minor Bull Campaigns of short duration, running one year or less, often run out in two sections, especially if the first section is from a sharp bottom. Therefore, always watch the action of the market after the second advance to see if it is forming a top and gives indications of a change in trend.

BEAR MARKET

A Bear Campaign runs opposite to a Bull Campaign-

1st Section- There is a sharp, severe decline which changes the main trend; then a secondary rally on which stocks are safer short sales. That marks the end of the 1st Section.

2nd Section- Then there is a second decline to lower prices, followed by a moderate rally.

3rd Section- A third decline or move to still lower prices, which may be the end of the campaign.

4th Section- There is often a 4th move, when you must watch closely for bottom. In determining whether it is final bottom, you use all of the other rules...watching old tops and old bottoms for definite indication that the main trend is ready to change.

Minor Bear Campaigns of short duration, running one year or less, often run out in two sections, especially if the 1st section is from a sharp top. Therefore, always watch the action of the market after the 2nd decline to see if it is forming a bottom and gives indication of a change in trend.

In extreme cases, like 1929 and the Bear Campaign which followed from 1929 to 1932, there are as many as 7 sections up or down, but this is abnormal and unusual and only occurs many years apart."

Obviously, this is very simplistic as compared to the work done by many Elliott analysts. I have personally found trading by Elliott wave principles to be difficult. But understanding the basic wave theory is a critical factor to market analysis. Most of my analysis is attempting to determine if three or four sections have run out. The following rules apply; wave two cannot go to new lows; wave three can never be the shortest wave; wave four never ends in the price zone of wave one.

One bit of knowledge to keep in mind when analyzing price movement is that bull markets go up longer than they go down. And bear markets go down longer than they go up, as a general rule. So if you have a low to high six week move up during a bear trend, you can assume the move down will exceed six weeks if the trend remains down.

Look at the Value Line weekly chart (Illustration 2.7), and we will do some ordinary chart reading.

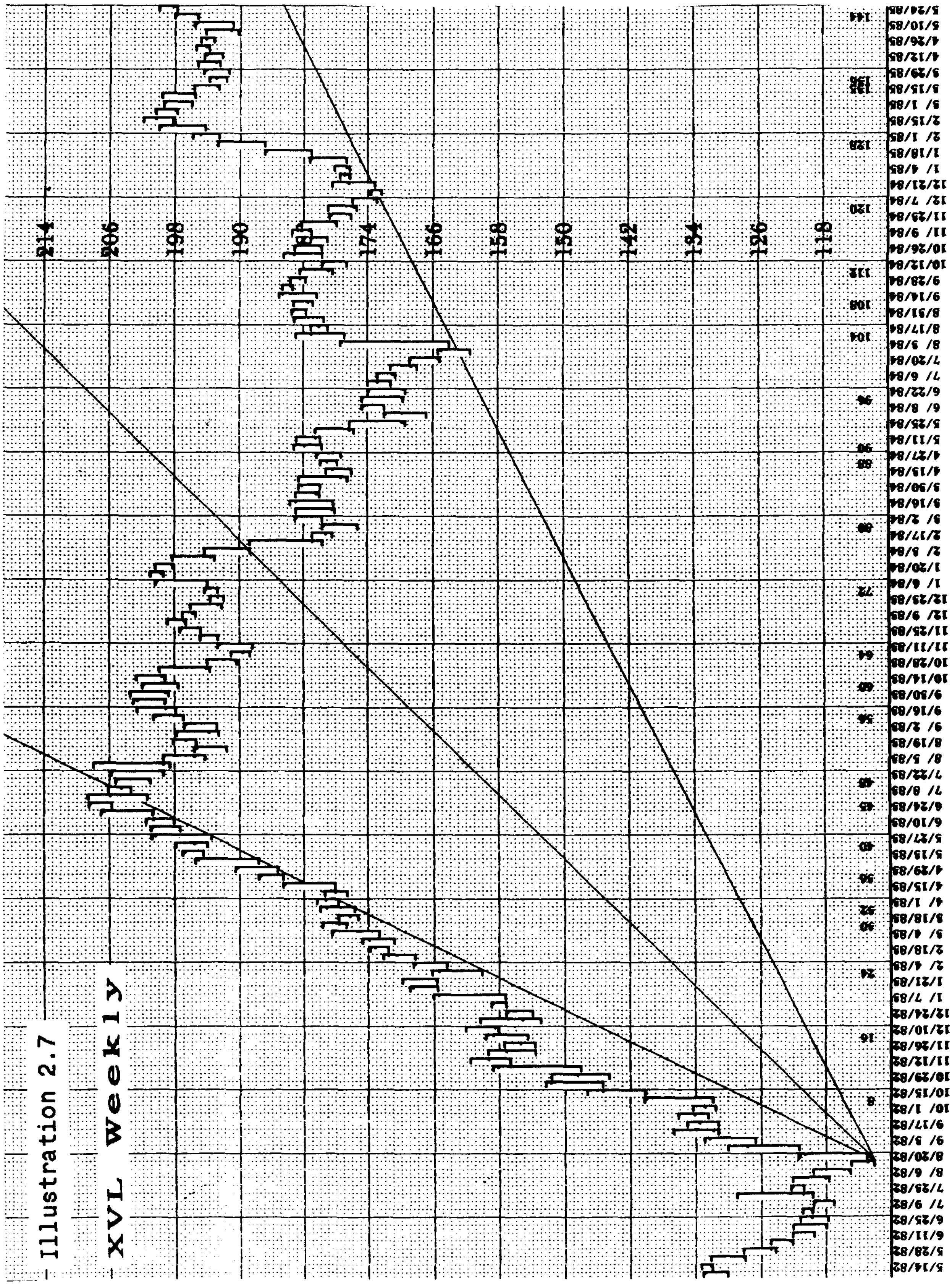


Illustration 2.7
XVL Weekly
214
206
198
190
182
174
166
158
150
142
134
126
118

First notice the consolidation or sideways movement during September and October of 1982. You see that there is not a great deal of validity. Volatility largely being, weekly ranges and fast up and down movement. Now, look at the November to December consolidation of the same year and notice the increase in volatility. Except for one clue, which is price being to the left side or above the 2X1 angle, this would be an indication of topping. The 2X1 angle rises at two points per week. This situation meant that the consolidation had very bullish implications. Now, look at sideways consolidation during March and April of 1983. Note the small weekly ranges. A significant top seldom, if ever, comes from that compressed form of a consolidation. Finally, look at the top in July of 1983 and see the large weekly ranges showing increased volatility.

Bottoms in the market and stocks tend to be a bit more difficult to locate, exactly. Spike lows will come more often than spike highs. The same changes in the momentum of price, as those tops, occur during this type of formation. Both bottoms and tops often come in with exhaustion types of movements. A stock after a bear trend may suddenly show a wide range heavy volume move down that is not followed by lows the next day. Generally this indicates an exhaustion of sellers, as a spike high indicates an exhaustion of buyers. Rounding or saucer bottoms are often excellent indications of a good price increase in the near future.

One of the price setups which I look for is that of a third or forth higher bottom. This situation does not occur often in any particular stock or market, but if you are following a number of stocks, you will see it often. In this type of formation, look for a fast move to start from the third or fourth higher bottom. The initial bottom being counted as zero, with the first higher bottom being counted as one and so forth. I also like to see a space develop between the low of bottom number three of four and the previous swing high. This is a very reliable pattern, but price must drop down into this formation. Illustration 2.8 shows an example of this pattern.

VOLUME OF SALES

The volume of sales is the real driving power behind the market and shows whether supply or demand is increasing or decreasing. Large buying or selling orders from professional traders and fund managers or any other source of supply and demand are bound to be registered on the tape and shown in the volume of sales.

Therefore, a careful study of Gann's volume of sales analysis will enable you to determine very closely a change in trend, especially if you apply all of the other rules for judging position according to the formations, resistance levels and time.

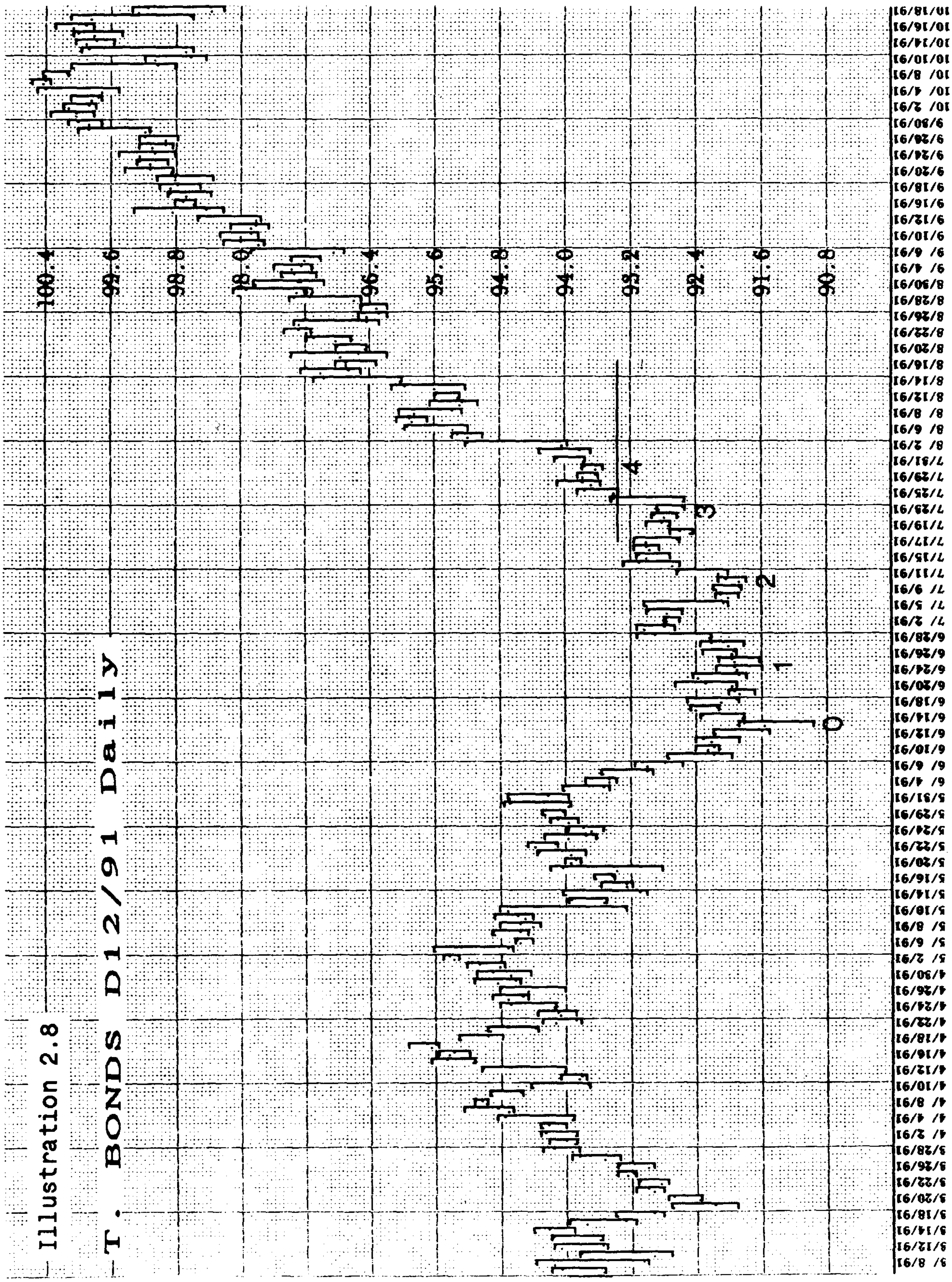


Illustration 2.8
T. BONDS D12/91 Daily

Rules For Determining Culminations By Volume of Sales

(1) At the end of any Bull Campaign or rapid advance in an individual stock, there is usually a large increase in the volume of sales, which marks the end of the campaign, at least temporarily. Then, after a sharp decline on heavy volume of sales, when a secondary rally takes place and the volume of sales decreases, it is an indication that the stock has made final top and that the main trend will turn down.

(2) If the stock holds after making a second lower top and gets dull and narrow for some time, working in a sideways movement, and then breaks out on increased volume, it is a sign of a further decline.

(3) After prolonged decline of several weeks, several months, or several years, at the time a stock is reaching bottom, the volume of trading should decrease and the range in fluctuation should narrow down. This is one of the sure signs that liquidation is running it's course and that the stock is getting ready to show a change in trend.

(4) After the first sharp advance (when the trend is changing from a Bear Market to a Bull Market) the stock will have a secondary rally after the first sharp decline. If the volume of sales decreases on the reaction and when the stock moves up, advancing on heavier volume, it will be an indication of an advance to higher levels.

Gann continues, "These rules apply to the general market, that is, to the total sales traded in on the New York Stock Exchange- daily, weekly or monthly- as well as to individual stocks.

SUMMARY: SALES INCREASE NEAR THE TOP AND DECREASE NEAR THE BOTTOM, except in abnormal markets, like October and November of 1929 [and October of 1987] when the market was moving down very fast and culminated on large volume of sales, making a sharp bottom, from which a swift rebound followed. As a rule, after the first sharp rally, there is a secondary decline on decreased volume, as described above under Rule 4."

TRENDS AND TREND FOLLOWING TECHNIQUES

Tops, bottoms and consolidations are probably the hardest trading to profit from in the market. On the other hand, there are the trends, and in trading, you will always make the most profit by following the trend. If you follow the main trend and put in the time necessary to study it's nature, holding on to positions until you get a definite indication of a change in that trend, you will make big profits. It is much better to make just a few trades per year, and make large profits from those trades, than it is to make many trades and small profits. As Gann said, "Let your rule be to GO WITH THE MAIN TREND, AND NEVER BUCK IT." If there is a long bull or bear campaign in effect, follow it, but don't allow yourself to become constantly bullish or bearish. Look for the indications of trend change, and, when necessary, use them as evidence to modify your strategy.

In fast, advancing markets, in the last stage of the campaign, reactions get smaller as stocks work to higher levels, until the final section, or run, has ended. Then comes a sharp, quick reaction, and a reversal in trend.

In the last stage of a bear market, after all old bottoms and resistance levels have been broken, rallies get less or smaller as prices work lower. Therefore, people who buy, have no chance to sell on rallies until the final bottom has been reached and the first rally takes place. This is why it never pays to buck the trend in the last stage of a bull or a bear market.

The word trend, in and of itself, is an indication that it is a lasting phenomenon. Up trends are generally punctuated with consolidations, and then, a continuation of the trends. Down trends often show a strong bear market rally shortly after the initial break from top, and consolidations are, also, a feature here.

Once you are convinced that a trend is in force, don't wait too long to go with the trade. If you wait for a major move to occur before you place a trade, you may find yourself buying a top before a correction, or selling a bottom before a rally. Although, the decision on the main trend may well be correct, you will find yourself stopped out of the trades on the corrections. Determining the right time and price to buy during an up trend or sell during a down trend, will become apparent from later chapters in this book.

Early in an up trend, it is a wise decision to buy stocks that are already strong. Stocks, which have broken to new highs are excellent candidates for continued moves up, as are those which are showing rising bottoms. In a down trend, stocks, which are weak to begin with, are the best candidates for early , short sales.

High momentum moves in trending situations occur at the end of cycles. If you will look at the Dow charts included in the chart package, you will see that this type of move happens on occasion. Often, they are associated with the sixty year cycle, at the end of the thirty year cycle, as seen in the late 1920's, 1950's, and 1980's. During a high momentum movement, as we have been witnessing, a pattern of trading or movement will develop.

As the move becomes more mature,corrections against the move will begin to become smaller in time and price. On a daily basis, often the pattern will appear as a slower moving stock, moving up and then giving a three day correction down to find a higher low. Price will pick up momentum on the next move up, and then correct for only two days. Momentum increases, again, and the next correction is only one day in length. This type of acceleration will usually show the overbalance of price and time (mentioned earlier and discussed later).

The only way one can enter into a movement of this type, is to buy the same correction in time as the previous correction, or to buy the breakout above the high price made before the correction occurred. There have been many high momentum movements of this nature, running for weeks with corrections being only one or two days in length. Fast moves, generally, come from bear market bottoms. These moves usually run three weeks up, then move sideways three to five more weeks, and then accelerate, again, into another sideways movement. This is often how stocks and markets find significant tops and bottoms, and expire very specific cycles. We will discuss this later.

During this type of high momentum move, the first indication of a trend change would be for that pattern of acceleration to overbalance or change. That is to say, a correction will occur against the trend which is greater in time and price, than previous ones. If previous corrections had been four days and four points, and then three days and two points, and then two days and one point, or a similar type of configuration, and a (for example) five day, five point correction ensues, then it is an indication that the end of the move is nearing

The first time the previous largest correction in both price and time for a run is exceeded, you can assume the trend is changing and therefore, change your strategy. Of course the market needs to have run out three or more sections. This does not mean that a rally cannot take place after this definite signal of reversal has been given, as usually after the first signal of a change in trend is given, there is a secondary rally in a bull market and time has to be allowed at top for distribution to take place. Therefore, just because you get a definite indication that the main trend has changed, do not jump to the conclusion that you can sell short right at that time and that there will be no rally. Always sell on rallies, if possible, although there are times that you can sell at new low levels or when bottoms are broken but that is after the trend is well established.

The following is Gann's description of this technique. "On this chart we have drawn a horizontal line across the chart in red ink; then beginning at "0" on this red line, we number up the number of points we want to record, which is the total number of points the Averages advanced before any important reaction; then we number from the red line at "0" to record the number of points the Averages decline from atop before a change in trend. For example:

A stock may advance 100 points and at no time during the advance reach more than 10 points- then after a final sharp advance, the first time it breaks back over 10 points, it is an indication that support has been withdrawn and the trend has changed.

Going back to the chart of the Dow Jones Averages, the last low was reached on June 1, 1929 at 293 1/2, and the final grand-rush and greatest advance in the history of the stock market followed from this point. The averages advanced and reached extreme top on September 3, 1929 at a high of 386, or a gain of 92 1/2 points in 14 weeks, from which the panicky decline started.

You will note that the numbers run down to 160 during the panicky decline culminating October 29, 1929. This was 150 points down from the top of September 3rd. A sharp 2-day rally followed to October 31, with averages up to 42 points. From October 31 to November 13, 1929, the greatest decline in history occurred, carrying the averages down 180 points, as you see on the chart. Then the followed the last greatest advance of 98 points. After that, the next greatest decline (before any important rally) culminated on December 17, 1930, with the averages down 90 points.

February, 1931, was top of the last big rally, with the averages up 40 points. After that the declines began to shorten and the rallies began to come more frequently. The decline which culminated on May 4, 1932, was 37 points down from the last high. After that the declines run 20 to 27 points on the down side. Then, after bottom was reached on July 8, 1932, in the sharp advance which followed to September, 1932 the averages advanced 40 points before a change in trend, the same number of points as on the rally to February, 1931.

After that, no movement carried the averages up over 20 points before a change in trend and a reaction of 7 to 10 points on averages until the advance of 27 points from June 1 to September 18, 1935.

By using a balancing chart on any individual stock, you can often get the exact point where an advance will culminate or a decline will stop. It is another point to confirm other indications. Very valuable if you keep it up and study it."

Another method you can use to determine when the trend is changing from a bull to bear, or visa versa, comes from analyzing the price levels of consolidations during the trend. In a bull campaign, the market or stock will drive upwards, then rest and move sideways for a matter of weeks. If you draw horizontal lines from the first top and bottom of this consolidation or sideways movement, you will be able to see this situation more clearly.

If there is space between these consolidations, the stock or market is in a strong (or weak) position. If the consolidation layer directly on top of each other, an up trend is still intact. However, if price moves back into the previous consolidation zone, you can assume the trend is changing and going into a topping (or bottoming) formation, or has seen top (or bottom). Drawing these horizontal lines will, also, help you determine the different stages of a bull movement. Look at the IBM weekly chart from August, 1982, then go over fifty other stock's weekly charts and you will understand when and how this technique can be applied. Illustration 2.1 shows this, as well, as the final consolidation before the high shows price dipping back into the level of the previous consolidation.

When you are looking for a change in trend, a loss of momentum in either an up or down move, is a good indication. In a down trend, look at the amount of time a stock is taking for price to loose a certain number of points or dollars. If it is taking a longer time to loose, let's say, five points, then support is coming into the stock, and it may be significant. The same thing is true of highs, if the stock is moving up. Loss of momentum occurs when it takes the stock a longer time to move the same number of points up, as it did in a shorter time in the past. Once again, this is significant, and is added evidence for positioning in a stock, but it is not a good setup, or applicable to timing. Computers have facilitated this type of momentum study, to a high degree, but channel lines are all that is necessary to visually represent the changes in momentum of price movement.

Finally, in trend changes, an immediate indication of change is the outside reversal. On a daily chart, this indicates the probability of a short term change in trend, and on the weekly, an intermediate term change. On the monthly, it is an indication of a long term change in trend. An outside reversal week down, as an example, is when price trades above the high of the previous week, then reversing directions and closing below the low of that same previous week. This is a sign of extreme weakness, if price is at a high level, or has been moving up. Reverse the price action, with price trading below the low, and above the high, then closing above the high at a bottom or lower point. This is an indication of extreme strength at a low level, or if price has been moving down. Outside days, weeks, and months which are in the same direction as the trend, and in the middle of a move in the direction of the trend, are of little use.

Although, outside reversals in price are good indications that the trend has changed, you should not trade from just that one signal. Don't put a lot of weight on just this price action. The time factors discussed in the next chapter, are the most important part of any good analysis. Illustration 2.9 shows numerous reversal days.

One good rule to use in all trading is, it is usually prudent not to trade on the third day of any move for a continuation of that move. If you have missed a bottom or top, a three day move against the trend is the normal movement. Thus, to trade on the third day of a move such as this is to make a trade which entails a fair risk, because a three day, or three week, or even a three month move, which is counter to the trend, is a normal movement in the market. If you position on that third time period for a continuation of that move, you may find yourself buying tops, and selling bottoms. Therefore, this simple trading filter of not entering the market on the third day of a move, can help anyone's trading performance. I do not want to belabor this point, but it is very important to your trading to be aware of the three day, three week, and three month moves against a trend in force. This, along with noting the number of points and days of previous corrections, should help you develop a feel for the markets and stocks. If you look at old chart books and apply that awareness to the price movements of today (in both bull and bear trends), you will see it's value.

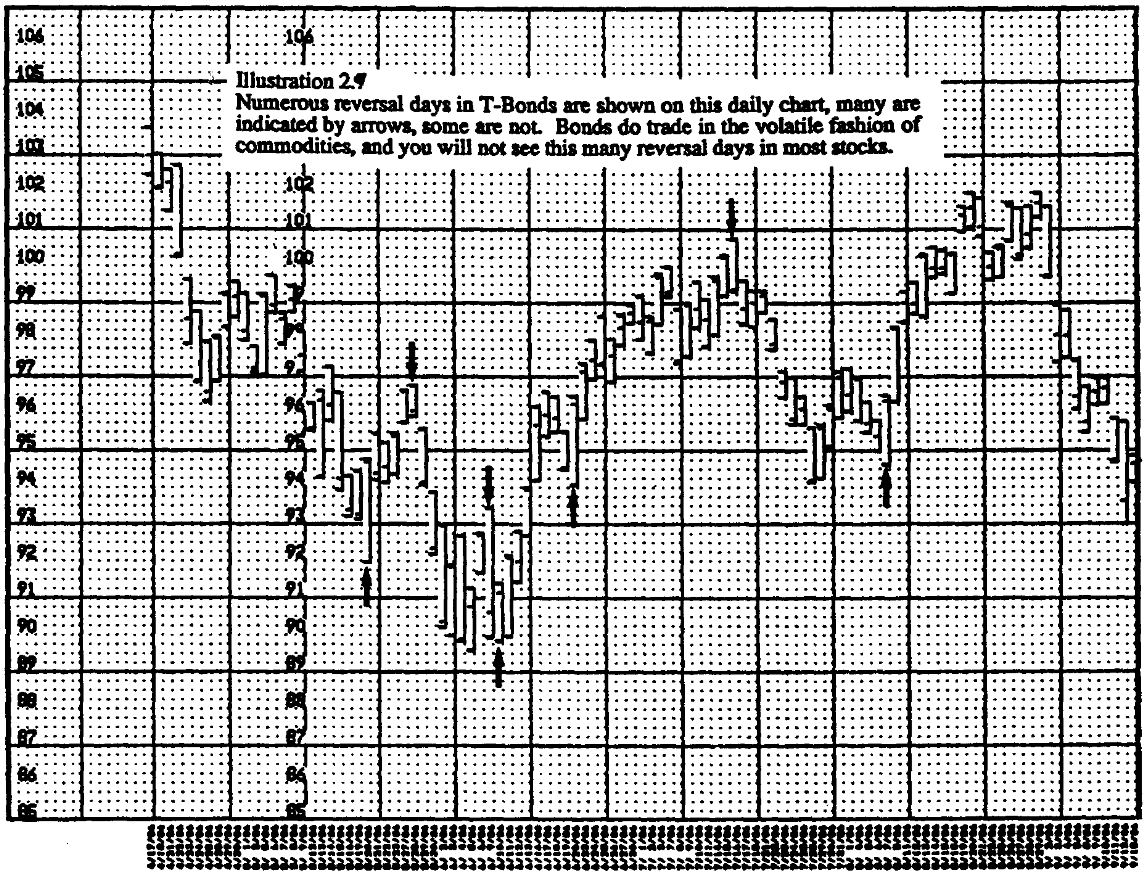


Illustration 2.9
Numerous reversal days in T-Bonds are shown on this daily chart, many are indicated by arrows, some are not. Bonds do trade in the volatile fashion of commodities, and you will not see this many reversal days in most stocks.

Before we leave this section, I would like to say one thing which Gann spoke of, and have found to be true. TRUST YOUR OWN WORK. Once you have a firm grasp of the techniques and their uses, and have shown for your purposes that they work, do not give a great deal of heed to what others say. Most of all, other than to give yourself a general idea of conditions as a whole, pay no attention to the financial press.

In order to keep what the press reports in perspective, remember these quotes: "Real growth of 4% is likely, not just for the rest of the year, but through all of next year as well." "An easier money policy on the part of the Federal Reserve and the belief that the posture will persist is a major reason many economists no longer fear a recession next year. And on Wall Street this means better time for interest sensitive stocks." "This coincides with a stock market that doesn't show any signs of speculation. The public is still basically out of the market." The first quote was from the Assistant Secretary of the Treasury. The others were from NEWSWEEK and U.S. NEWS AND WORLD REPORT, dated November, 1972, September, 1973, and October, 1973- the onset of a severe bear market.

THE CYCLE OF THE YEARS

Today there is a considerable amount of work being done in the use of cycles. W. D. Gann was the first analyst to use time as a factor in analysis. With the advent of the computer, it is possible to do studies on price and time from low to low, or high to high, with consideration for major and minor cycles, and numerous permutations of data. What is produced is usually an average time period between past lows, and an assumption that the market will continue to follow these same cycles in the future. Much of this work is valuable, but it is often difficult for the individual to actually produce this information himself, or to put it to use in trading.

If the market is trending up, then it should go up more time than it goes down. And if it is trending down, then price should go down more time than it goes up. When viewing cycles you should always keep this little bit of knowledge in mind. If you think the trend is down, then you have the start of a road map in time to the length of time to a rally (not more than the previous movement down).

It is widely known that Mr. Gann used a considerable amount of reference to planetary movement in his forecasts, and that his "cycles" were based upon these observable phenomenon. I have found very little of his work would fall into the category of astrology. The basic calculations or vibrations are based upon geometry of which planetary movement and distances are one in the same. This is discussed in the chapter on planets.

A large number of things can be said for astrology, both positive and negative. It is not my purpose to give such a discussion, although, I am of the opinion that the classic form of astrology has little validity in trading the markets.

Looking quickly at the obvious relationships. The circle is divided into degrees, 360 of them, which encompasses a year of 365 days. The calendar for one year is divided into 12 months, the average month being 30 days, which is from the 28 day lunar period. The four seasons of the year, with the solstices and equinoxes, gives us the four quarter which are used in financial reports.

The year as a cycle is obvious- so obvious that it becomes almost moot in any discussion of cycles. It is apparent and has visible effects on our lives, and that cycle, of one revolution of the Earth in its orbit around the sun, was the basis of Gann's cyclical work. The idea of a wheel within a wheel from the biblical prophet Ezekiel is the second step of this cycle. The year, constitutes a complete cycle, and divisions of that year, looking inward give us smaller time cycles which are times to look for change. The larger cycles, or years outward, are also taken from this initial vibration. These cycles could be viewed as the hands of a clock. When the second, minute and hour hands are all in geometric relationship to each other then things will change. If you took all of the major cycles and designed a wheel within a wheel, within a wheel, you would find that all these time cycles are a direct geometric proportion to each other. With that out of the way, I am not going to attempt to explain the why or wherefore of all of this, but will now continue to give you the tool, and its aspects. One idea that you could note, is that these cycles are not based on the time period between lows, or and price related phenomenon other than expected change. These cycles are time cycles only, based on the physical time periods of the solar system, and are used to determine dates that we can expect a change in the market direction.

SEASONALITY AND THE MARKET

W.D.Gann did research related to seasonality, and its effect on the market. It is worth noting the dates he derived from this work. The following is A quote from Gann's research:

"The winter quarter begins on December 22nd and fifteen days from this date is January 5th through 6th, which are always important dates to watch at the beginning of each year, as stocks often make extreme highs or extreme lows around these dates and a change in trend takes place. When stocks make low in December just before or just after the 22nd, a January rise usually follows. This rally which often culminates around the 3rd to the 7th, however, in some years will advance until around the 20th to 21st."

"February 5th is 45 days from December 22nd and a minor change often takes place around this date and is sometimes very important as tops and bottoms are reached. March 21st is 90 days from December 22nd. This is the date when the sun crosses the equator and spring begins. The spring rally in the stock market often starts around this date or culminates if stocks have been advancing previous to this date."

"May 6th is 46 days from March 21st, or 135 days from December 22nd, and equal to the 135 degree angle. Watch for important changes in trend around this date. June 22nd is 93 days from March 21st, equals 90 degrees and, of course is opposite December 22nd and is important for seasonal change as summer begins on this date."

"July 7th is 15 days from June 22nd, and 6 months or 180 days from January 7th. July begins as advances or declines often culminate around this date and an important change in trend takes place. It is the next important date to watch after June 22nd. August 8th is 47 days from June 22nd, but the sun has only moved 45 degrees, which equals the 45 degree angle. This is a very important date for a change in trend and you should watch stocks that make tops and bottoms around this date."

"September 23rd is 93 days from June 22nd, but the earth or sun has only traveled 90 degrees. The sun crosses the equator at this time and is 180 degrees or opposite the point where is crossed the equator on March 21st. Fall begins on this date and stocks make important changes in trend. November 8th is 46 days from September 23rd and equals 45 degrees. You will find, buy checking the records that many important tops and bottoms and changes in trend occur on this date. December 22nd is 91 days from September 23rd, and six months or 180 days from June 22nd. This is where winter begins and it is important to watch for important changes in trend."

From this, it is obvious that Gann was using the year as a cycle, and the geometric divisions as cycles for change. Seasonal studies from 1897 show the period from the 27th of July to the first week in August as having a definite bullish bias. And that Fridays have the highest probability of being up days and Monday the highest probability of being down days. August has a very high probability of being an up month. September, historically, has a bearish bias.

Another interesting and tradable aspect of this is, the phenomenon of days preceding holidays. Using all days before holidays, including times during bear markets since 1897, the following is the percentage of times the market advance before certain holidays: Labor Day- 82% of the time, Independence day-77% of the time, Memorial Day- 74% of the time, Thanksgiving- 59% of the time, Christmas- 73% of the time, New Years- 72% of the time, Good Friday- 61% of the time, Presidents Day-no significant percentage. If the percentage is worked out for all holidays combined, it comes to almost a 70 percent likelihood that the day preceding a holiday will show a positive close. Of course this is a well know fact among professional traders, and they will often accumulate positions a day or two earlier, and then sell these the afternoon of the day before the holiday.

THE CYCLES OF THE INNER YEAR

The year is a cycle. There are 360 degrees in that full revolution. We divide that up, based on the seasons, into 90 day periods, and we divide it into months,based on the lunar cycles. So, as divisions of a year are concerned, we have the following important time periods for moves in the market. Ninety days, 180 days, 270 days, and 360 days (one year) from the seasonal changes from significant highs or lows in the item that is being analyzed. We also have divisions by months, or 30 days, 60 days, etcetera. Making one more step inward with the seasonal aspect gives us a 45 calendar day count.

From all of this are the basic calendar day counts which we will use in our examination of price movement through time. Counts of important highs and lows (within the year) are 30, 45, 60, 90, 135 (90+45), 150, 180, 210, 225, 270, 315, 330, and 360. These could also be extended outward, which I only do in 90 day increments. These calendar day counts should be placed on you daily charts from significant highs and lows. Obviously, you should not always expect to see exact changes in the market- to the day- from the calendar day counts, but should use them as a road map to measure the duration of moves, and also as general time periods to look for more significant changes in direction.

What you are looking for from the calendar day cycles are the moves that go up or down for a full 90 calendar days, or a longer, period of time. It becomes much easier to trade if you know the market has a probability to up for 90 days. When you see this happen, you will get trading situations from the counts which are "setups." As you will see in the exercises, you can also find 45 day and 30 day moves fairly often.

Gann, in his work said, "you can look for a top on the 90th to 99th day". This is somewhat misleading. If you are to apply that to every move in the markets, you will find that it seldom works. There are circumstances under which it works nearly all of the time though, and these are the 90 day blow off moves. In fact, if you looked at every significant high before the onset of a bear campaign, you will find a significant low 90 days back from that high, a vast majority of the time.

Another set of counts which Gann used in his work on daily charts, and which you can look for changes in market direction are the trading day counts. These trading day counts come from the same source of cycles, and are best explained as divisions of 90 days. By dividing 90 by eight we have the following counts 11, 22, 33, 45, 56, 67, 78 and 90, and extending outward from 90, 101, 112, 123, 135, 146, 157, 168, 180. The relationship between calendar day counts and market day counts is quite close to producing the same date. As 11 market days can be 15 calendar, 22 market days is almost exactly 30 calendar days, and 33 market days is very close to 45 calendar. Once you study these cycles for change in trend you will understand why the calendar day counts, or cycles, will give you a better understanding of time.

I no longer put trading day counts on my daily charts and I rely on the overlays for that purpose. You can also determine where the calendar day counts are, by moving the overlays to a 45 degree angle.

These counts start with the exception day, the high or low day being counted as zero. That high or low day is the last day, or the completion day of the cycle, and the next day, is the first day of the next cycle. So, a low or a high should be treated as the zero day, with the day after being day one of the next cycle.

Counting from all of the swing lows and highs, using the trading day counts, will often produce a grouping of those counts on the same day, where you find as an example, a 22 count, an 11 count, a 56 count, and a 90 count. Price might be 22 1/2 points from high or low. When you see a situation like this, specially with a 45 or 90 count involved, it is usually a definite cyclical vibration. Under the right circumstances you will be able to find a certain day on a daily chart from which every 11, 22, 33, 45, 56, and 90 market day count changes the trend (minor swings). And, in hindsight, this will look very intriguing, but the true understanding of cyclic vibrations lies in those of the calendar days.

Obviously to people who have studied Gann, what I have just described is the square of 90, and its time use on the daily trading day chart. The square of 90 is one quarter of the 360 degrees of the Earth traveling around the sun. The price divisions of the square of 90 are the same as the time divisions, and should be monitored closely.

This brings up the question of which should I trade? The market day or trading day cycles. First, when viewing the market day cycles, you are in many instances looking at calendar days. Only the counts are different- as 33 market is 45 calendar. There are many times, as you will see in the exercises, that the angles generated on market day charts along with the angles on the square of 90 are very important when used on market day charts. But you are really trading the calendar day cycles. This question should answer itself by the end of this book.

On a weekly basis, the counts from 90 are also important, although I pay much more attention to a complete 90 or 180 weeks. There will usually be a quick sharp move as these cycles expire, and if qualified with other work, could be a change in trend. Although on a weekly chart use 13 weeks (90 days), 26 weeks (180 days), 39 weeks (270 days), 45 weeks (315 days) and of course 52 weeks, and so on. This is the square of 52 which is discussed later in the text.

Gann described the 7 week period as a death zone. The reason for this is many markets and individual stocks and commodities will start or terminate fast moves with this 45 calendar day cycle.

A stock makes a low or high and then begins to accelerate in the other direction. A significant movement against this acceleration occurs, with the end of this corrective move coming very near 45 calendar day count in time from the start of the move. Then the stock begins to accelerate again, and continues to accelerate, with movements against the trend becoming shorter in time and less in price as the movement continues. Obviously, what I am describing here is a 90 day blowoff. The key here is the death zone week is also a significant time period as 52 weeks or 78 weeks.

There are many setups from this cyclical work on the weekly charts. A certain week may be 26 weeks from a bottom and 13 weeks from a top and move down in price into that time. That is an excellent time to look for a change in trend, or a short term trade, especially if you can find other cycles lining up, possible time is 180 weeks from a previous top, and 208 weeks from a bottom. If I see that type of situation on a weekly chart, I will then check the monthly charts to determine support and resistance, and if that chart presents a good possibility, I will go to the daily chart to find the day to position, but more on this later.

Finally, the monthly charts are the outward extension of the cycle of the years. From significant highs and lows on the monthly charts the method which I now use is to count by 6 months, giving the half and full years from those significant prices. Then I use the overlays to more refine the analysis.

One of the main reasons for analysis of monthly charts is to determine the extent of the move. Since the normal move on the monthly chart is three months, your attempting to determine if that is a probability.

On the monthly charts you will apply the famous Gann square of 144, which is 12 months times 12 years, and the square of 90. the square of 144 geometric divisions are quite interesting. One eighth is 18 months, 1/4 is 36 months, 3/8 is 54 months, 1/2 is 72 months, 5/8 is 90 months, 3/4 is 108 months, and 7/8 is 126 months. This square is discussed later in the text.

Realize that the counts or cycles are all related. On the monthly charts, you have 270 months equals 22 1/2 years or 1080 months (3 times 360) equals 90 years, or 2160 hours (6 times 360) equals 90 days. The wheel, with a wheel, with a wheel with spokes equal geometric proportion apart.

Gann spoke of many long term cycles in his work and indicated that these cycles are important in his mystical fashion. The long term cycles which he used in his work a the 90, 60, 50, 30, 20, 10, and 5 year cycles. The 60 year cycles is found in both Jewish and Christian teachings, which the most probable reason for finding it's presence in Gann's work. The teachings indicate that you should forgive debts every 60 years. History shows this to be a time of defaults on debt and financial stress.

In the appendix is a chapter on forecasting written by Mr. Gann. You should, now, study that section.

In the remainder of this text, I will assume that the cycle of years is valid, and that it is worked out in the price-time relationship of the market. You will have to show yourself that this is true. There are other long term cycles which are well documented, such as the Kondratieff cycle which reflects not only financial but also sociological and political occurrences in its repetition. The obvious recurrence of this cycle is a very strong inflationary binge, follow by a deflationary plateau which culminates with a financial disaster and many defaults on debt. But, that cycle is not of precision timing as these cycles test out to be.

GEOMETRIC CHARTS, ANGLES AND PRICE SQUARES

GEOMETRIC CHARTS

The first time I saw a Gann chart with the counts, the angles, and the squares on it, I said, "Ok, great, you have so many things going on here that something is going to have to work." It was only after years that I found that all of the information on the charts had a common basis. The counts, I found, came from the cycle of years, and the angles are a geometric relationship between price and time.

These charts have a square relationship between the horizontal and vertical factors of what is being charted. This grid pattern has been applied to almost all methods of charting from map making to stock and commodity market analysis. What is important here is the relationship that Gann used between the factors on the two axes of the chart.

This geometric principle of an identical unit representing both time and price gives the user of Gann's methods the so called "squared" charts. For instance, on a monthly chart for an index or stock one point or dollar is equivalent to one time period. Commodities present different looks depending upon the price units in which they trade.

Gann kept monthly, weekly and daily charts. He, also,in some cases kept yearly and quarterly charts and, although these charts do have value, most people cannot obtain such data or do not have the patience to use such charts which are not very tradable. So, for the normal trader, the monthly charts are the most important charts, and although you may never trade from them alone, after you work with them, and see the set ups, you will realize their value as a trading tool. These long term charts should have at a minimum 15 years of price data, hopefully more, and give you the perspective of what the market is doing now, from a historical basis. Also, by using them in conjunction with a basic trading plan, you will be able to have a much better idea of what type of market is likely in the coming years. A note to intra-day traders- your trading will improve through the use of monthly and weekly charts. What if you were told the market would be trending up for the next three months, with the largest correction not to exceed 11.5 points and 10 days. And the next three days the market will be straight up and not even get close to the previous days low. Ok, go trade it. Wouldn't that make intra-day trading an easier task? You can only acquire that knowledge from longer term charts.

If you have the discipline and patience necessary to trade from the monthly and weekly setups, which I will present later in this book, and to use the daily charts for entry into planned trades, you will find your percentage of successful trades to be very high.

Weekly charts are excellent trading tools. The setups that you get from them are times that the stock will give you a good move in a very short period of time. A weekly chart should have at least five years of price action on it for reference purposes. The normal change in trend from a weekly setup is possibly three weeks. You should also use these charts to verify time periods and price levels for entry into the longer term trades from the monthly charts.

The daily charts are probably the most glamorous charts, and the most dangerous. You will find yourself spending five times as much time on the daily charts, in posting price action and general maintenance, as you do on the weekly charts, and maybe twenty times as much as on a monthly chart. The danger lies in having this exceptionally short term trading indicator become the most important part of your psychology because of its constant presence in your work. This obviously goes double for intra-day charts. But they all work together to, at times, give a very clear picture. The minimum would be one year data on daily charts.

I have found that on daily charts using the one dollar per day format is unwieldy, and I prefer to have a scale that places the price action in a proportion that is common to most charting. For fast moving stocks above 150 dollars I do use one point. Below 150 but above 90 I use 1/2 point per day, for stocks under 90 but above 30, 1/4 point per day, and for those priced under 30, in some cases, 1/8 point per day. Stock indexes work well at one dollar per day. The T-Bond contract works best on a daily chart at .10 per day.

You will find that when you apply the methods presented in this book to daily charts, you can find almost every change in trend in a stock or market. That is a danger. Trading in hindsight is significantly different from real time trading. If you attempt to trade every movement a market makes, you will very likely have problems. Trade only what you know and understand, trade the setups, not the markets.

Probably the most difficult chart to trade from is the intra-day chart. Actually, it can be quite simple if viewed from the proper perspective. Stocks use 1/8 point scale. S&P Futures use .125 per half hour, or per box if you use a different time series. I will go into the reasons for these scaling difference later in the book as this knowledge is critical to understanding Gann theory.

A final note about the charts, is that one of the advantages to using geometric charts is the tremendous amount of technical data you can show on each hand done chart. I know Gann students whose charts resemble works of art and are enclosed in plastic. I doubt they do very well trading, if they trade at all. Your charts should have notes and probabilities written on them so you do not need to do the same analysis twice. If you do computerized technical analysis you would be wise to mark on the charts the points were buy and sell signals appear from that work. This will allow you to see at what price and time those occurred. After some period of time you will be able to qualify those signals better with the understanding you will develop from this analysis. Doing this will allow you to avoid the many whipsaws that are inherent to those buying and selling oscillator signals.

ANGLES

From the use of the charts which have the equal time and price relationship, Gann went on to find that certain fixed angles had a very significant relationship to price movement. The basis of the angles which Gann used came, again, from the 360 degree circle. This circle, or more specifically, one quarter of the circle or 90 degrees, is the basis of the angles.

Anyone who has studied the recurrence of events is aware that events do follow cycles, and when these cycles are viewed as circles, the relationship of time and event becomes easier to picture. The illustrations below show how the circle relates to the angles, and then further to the squares which are so prevalent in Gann's work. The circle is one of the basic elements of geometry, and the angles radiating from the center of the circle divide it into sections. The circle is divided into 360 degrees, with four major divisions or cardinal points within the circle, one every 90 degrees.(Figure 1)

The 90 degree angle is the basic angle of a square, and if we view it in this fashion, the square formed by the 90 degree angle in the circle appears as shown.(Figure 2)

The 45 degree angle divides the square in half and gives a further division of the circle.(Figure 3)

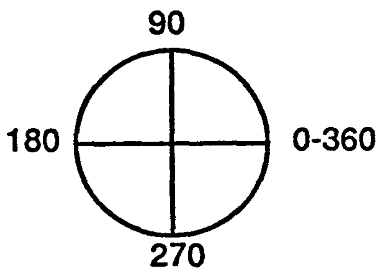


Figure 1

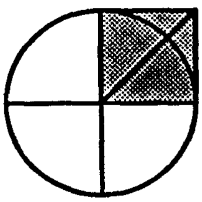


Figure 2

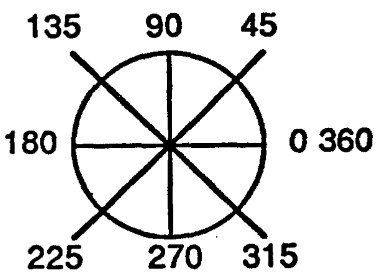


Figure 3

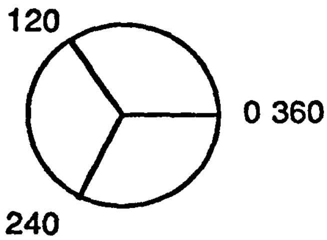


Figure 4

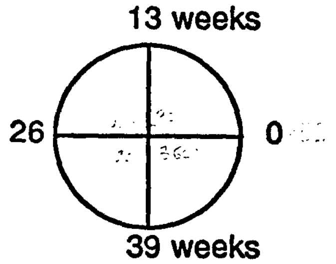


Figure 5

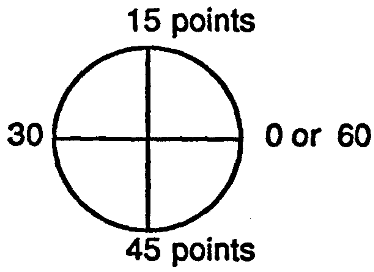
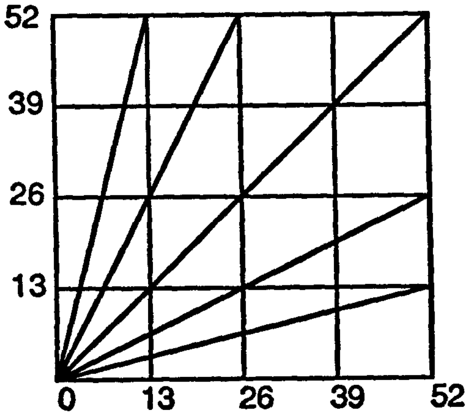


Figure 7

Figure 6



The next significant division of the circle is by thirds, which is referred to as trines, and the degrees represented are 120, 240, and 360. (Figure 4)

So, the counts along the chart from significant highs or lows are an indication of the time cycles in a linear manner. Ninety degrees of one year in days is then 90 days. Another way of viewing the counts is to picture Figure 3, hold the circle at the point marked 0 and open it up and straighten the circle until it is a flat line with the numbers running from 0 to 360.

There are two types of cycles with which Gann worked. The first are the time cycles, or natural cycles, and the second is directly related to the price movement of the stock, index or commodity being analyzed. To take the natural cycle of one year in weeks is to look at 13 weeks as one quarter (90 degrees), 26 weeks as one half(180 degrees), etcetera, so, that the cardinal points of this cycle, as viewed on a circle appear as shown. (Figure 5) Placing this cycle on a geometric square, for use on the square charts, gives us the square of 52. (Figure 6).

Two cycles of this square is 104 weeks or 720 degrees, and 208 weeks is four years or cycles. The ten year cycle is 520 weeks. Since ten years is a very important cycle in itself, we should view it also as a circle.

We can take a major cycle, such as the 30 year cycle, and view it as the following:

30 years or 360 months
22 1/2 years is 3/4 or 270 months
20 years us 2/3 or 240 months
15 years is 1/2 or 180 months
10 years is 1/3 or 120 months
7 1/2 years is 1/4 or 90 months
5 years is 1/6 or 60 months
3 3/4 years is 1/8 or 45 months
1 7/8 years is 1/16 or 22 1/2 months
1/12 is 30 months
1/32 is 11 1/4 months

So, these are the natural cycles, and the method that Gann used was to place these on a chart in a square form. The second set of squares which Gann used were those generated by the movement of price. By viewing the high, low, and range of movement in the price in this same cyclical fashion, he invented the squares of the high, low, and range. So, on a circle, assuming a range in price of 60 points, the cyclical form of that movement would appear as shown in Figure 7.

Placed in a square, and applied to a weekly chart, the most important part of the cycle would be 60 weeks, or points. Thirty weeks, also being important, but secondary. Of course, a 30 point move would be a fifty percent retracement (180 degrees).
The cycles which Gann used, both those from the cycle of the years and those from price, must indicate a change at regular intervals. The key word here is CHANGE, and if change is not evident, it is unlikely that the cycle is valid. The cycles do not necessarily run from low to low, showing a sine wave type of formation, but indicate a change. In other words, the one year cycle could run from low to high, with a reversal after one full year. It may, also, show price rising for 270 days, and then correcting for 90 days into a second low at one year from which price again rises.

In general, the best setup from the cycles is to have three or more coming out at the same time period on a chart. A typical setup would be longer term cycles, such as five year and seven years, with a shorter term cycle such as a 90 day cycle, in which price accelerates in that time frame into a blow off movement.

Returning to the circle, and it's divisions. The angles which Gann used come from this source. In the remainder of this book you will find references to 1X1 angles or angles that travel at the rate of 1 point per time period, this is a 45 degree angle. This 45 degree angle could be 1 cent per time period. It is just the simple matter of traveling one unit of price per one unit of time. You will see the same references to 2X1 angles, and 4X1 angles, although the latter is used sparingly. These angles are all referred to on the basis of "rise over run", or the price level followed by the time period on the chart. A 1X2 angle, or an angle that rises one point for every two time periods will be referred to also, and this rise over run method will be use throughout this book in reference to angles.

These geometric angles not only offer support and resistance on the chart, but also, measure space and time periods, or in other words, they do mathematical and geometric calculations. This is substantially easier than calculating these prices and times mathematically, and it will also allow you to visually see the price levels and time periods.

There are three angles of major importance. The 2X1 moves up or down at 2 points per week or month. The 1x1 or 45 degree angle, which is the most important, accurately measures time periods as in the square of the range. The slower 1X2 moves at half the rate or one point every two weeks or months. Other angles that are used are 3X1, 4X1, then 8X1 which you will only use during very rapid extended moves or on daily charts. These angles then give you a visual idea of the type of momentum the stock or market is developing. The 3X1 angles are used primarily on monthly and weekly charts.

There are a few points about the angles which should be covered now. First of all, the angles are drawn from major highs and lows, with the angles moving down from highs, and up from lows. Angles from the highs represent resistance areas, although, they can afford support if price is at a harmonic to time. Angles up from low give support. Angles from high and low points in price are very important to the resulting move from that low or high. But, angles drawn up from zero, from the date of major lows and highs on the chart are, also, very important to this work.

In and of themselves, the angles are helpful to trading but do not stand on there own as support and resistance levels. They may be a trigger to a trade. On a daily chart, these angles may be broken early in a drive and then recovered, which would be a buy indication. But, if support is shown on a fast angle you could expect a fast move in that direction. On Weekly and Monthly charts, the angles can be exact support and resistance and should be monitored at all times.

The following is an excerpt from instructions Gann gave concerning angles:

"It is not necessary to draw angles from a long way back. You can make the calculation and determine where they cross. For example: Suppose in 1900, in the month of January, a stock made bottom at 15, and I want to calculate where the 45 degree angle will cross 20 years later in January, 1930. The 45 degree angle rises at the rate of 1 point per month. Then 10 years would be 120 months or 120 points added to 15 at the bottom; the 45 degree angle would cross at 135 in January, 1930. All of the other angles may be calculated in a long way back the same way.

From any bottom, base or beginning point, two 45 degree angles can be started, one running up from the vertical angle and one running down from the vertical angle. You can also use a 45 degree angle or any other angle from any top, running the 45 degree angle down from the top, which indicates a decline of 1 point per month, week, or day, according to your scale of prices; then running the 45 degree angle up from the top, which would indicate a gain of 1 point or 1 degree per month.

For example: Take the low of U.S. Steel on November 13, 1929, when it sold at 150. Start the 45 degree angle up and it gains 1 point per month; then start the 45 degree angle down from 150 and the stock has to decline 1 point per month to rest on the angle of 45 degrees. November, 1930, was 12 months from November 1929, and Steel made low at 138, which was on a 45 degree angle from bottom at 150 on an even time cycle. In December, 1930, Steel made as extreme low of 134 3/8. This was 2 points under the 45 degree angle from 150, but rested on the angle of 2X1 from the low at 111 1/4, made in January, 1927. In December, 1930, Steel closed above the 45 degree angle from the bottom of 150. As long as it stays above this angle, it is in a stronger position, but to regain the strongest position, it will have to cross the angles of 45 degrees from 150 on the up side and stay above this angle.

Remember that when any stock breaks under the 45 degree angle on a daily chart, weekly or monthly puts it in a very weak position and indicates a decline to the next angle. However, when a stock can regain the 45 degree angle, it is in a stronger position. The same rule applies to a 45 degree angle up from any top. When a stock crosses the angle on the daily, weekly or monthly and stays above the 45 degree angle, it is in a very strong position. After a stock once drops below or gets above any important angle and then reverses its position by getting back above the angle or dropping below it, it changes the trend again.

The angles on the Monthly and Weekly charts are, of course, of greater importance than those on the Daily charts, because the daily trend can change quite often, while only the major changes are shown according to the angles on the monthly high and low and weekly high and low charts.

Always consider the distance a stock is from its base or beginning point when it breaks any important angle or crosses any important angle. The farther away from the base, the more important the change in trend, whether this be crossing an angle from the top or breaking under an angle from the bottom.

There are three important factors to consider, price, time and space movements. For example, when the price reaches 45, it meets resistance because it is equal to a 45 degree angle. Then when the price beaks a 45 degree angle, regardless of whether the price is at 45, 67, 90, 135, 180 or anywhere else, it weakens the position and equals a resistance angle, but is more important when a long ways from base. The distance the stock breaks the angle of 45 degrees or any other from the base is the most important. For example, many times a stock will rest on the angle of 45 degrees in its early stages when advancing, then later in reaction rests on it again, then have a prolonged advance, react and rest on the 45 degree angle again, and then hit a higher level, break the 45 degree angle the fourth time, which places it in an extremely weak position because it is so far away from the base and so much time has elapsed since the stock made low level. Reverse this rule in a bear market or a decline and don't forget to consider that the monthly and weekly high low charts are the most important when angles are broken. Daily charts can break angles and recover them and it is impossible for a daily high and low chart to maintain an angle of 45 degrees for a very long period of time except when the final grand rush comes at the end of a big bull campaign."

Fast angles such as the 2X1 or 4X1, if valid support or resistance, will yield fast moves. This is very true on weekly and monthly charts. I'm sure you have seen those moves which start from a saucer bottom, where each low fails to move down to the previous trendline and actually starts a higher ascending trendline. If you took those situations and applied angles, you would find that the ascending trendlines are really ascending angles of the next higher degree. Usually breaking the fourth ascending trendline indicates the trend has changed.

Angles from zero, originating from the dates of major lows and highs, are very significant. These must be on all weekly and monthly charts. Gann emphasized the importance of these angles starting from zero, and anyone who has studied those angles will find the reason to be obvious.

PRICE SQUARES

One idea that I am certain has caused a good deal of confusion among individuals who are early in their study of Gann's work, is the idea of squares. Gann referred to cycles as squares, and the squares which he used were geometric squares, that is, just a plain square drawn on a chart with four equal sides. This is not a number multiplied by itself. The squares which Gann used, besides those of the major time cycles, were the square of the high, the square of the low, and what Gann considered his most powerful tool, the square of the range. These three squares or cycles are all based off of price movement.

A fully constructed square is a very complicated piece of art work which consists of the square itself, and all of the angles which Gann used radiating from the top and bottom left hand corners. Following this, the divisions in time are marked with vertical lines, and in price, the divisions are marked with horizontal lines (remember Gann referred to these also as angles). These divisions are, in both price and time; 1/8, 1/4, 1/3, 3/8, 1/2, 5/8, 2/3, 3/4, and 7/8.

Gann used these squares for timing and to find horizontal divisions in price at which to expect support and resistance. He said that you could look for change on every one of the divisions in price and in time. But, if you do that, you are spending a considerable amount of time. Other than midpoints, I have never had any confidence in the divisions, alone, as a tradable setup.

I would suggest you know where they are, and if price action and other evidence gives you reason to consider the divisions of a minor square, then this may be the frosting on the cake. But don't position on any one division in time or price without further evidence.

The important times to look for change in trend from price squares are at fifty percent in time of the square, as well as, the full square in time. Also, the fifty percent (180 degrees) in price level is very important. One of the best setups that come from this work has to do with price moving into both fifty percent of a square in time and in price in the same time period. When the price of a stock falls from it's high into that point where it is at 50 percent of the high or range in both price and time, it is a setup. You can look to buy with confidence. This setup does happen often even on monthly charts.

To draw a complete square on every chart for every major range, high and low would be confusing, and an extraordinary waste of time. All that you have to do to get the important divisions of the square of the high or a range is to draw the angles. A 45 degree angle is drawn down from the high, and a 45 degree angle drawn up from zero (for the square of the high), where they intersect is 50 percent price and time. The 2X1 angle from the high will give you 1/4 of the square in time when it crossed the 50 percent mark, and 1/2 the square when it hits zero. The 1X2 angle will give you twice the square of the second square when it hits zero.

Let's take a closer look at these squares, and see how Gann personally described their use.

The Square of 52

The square of 52 was developed for use on weekly charts. In the materials that came with this text, is a square of 104 which is two squares of 52. It has been my experience to not only place the square of 52 on all important highs and lows, but to also place it on the lows or highs which started a ninety day cycle. (Supplemental materials- S&P 500 weekly)

The following pages are an explanation of the square of 52 in Mr. Gann's own words:

"This Master Calculator shows Weekly Time Periods of 7 days each or a total of 52 weeks in one year. This represents 364 calendar days, therefore at the end of each year there is a gain of one day and at the end of 7 years a gain of 7 days, the time period coming out one week before the date of the important high and low prices. You must also add one day for each leap year. Suppose you want to get the time period for 15 years, you multiply 365 by 15, add the number of leap years and then divide the total by 7 to get the weekly periods of 7 days each in order to use the calculator.

The total square of 52 is 2704, which we can use to measure weeks, days, months, years or hours. In using days, it would, of course, require 2704 days to pass through the square of 52. This would give 386 weeks and 2 days or approximately 7 years and 5 months, very close to the important cycle of 7 1/2 years, which is 90 months.

If we use hours to balance or square 2704, we get 112 2/3 days by dividing 2704 by 24, the total number of hours in a day during which time the earth makes one complete revolution on its axis.

The Square of 52, which is composed of 7 day periods, is one of the most important for measuring price and time. The number 7 is referred to in the Bible more times than any other number, except the number 3. Both of these numbers are very important to use in connection with price and time changes.

You start time periods from the actual dates of important high and important low prices and not from the first day of each month or the first day of each year.

The Calculator is 104 weeks wide, which equals 2 years. The time periods run across the bottom of the Calculator from left to right to 104, which completes 2 years."

DIVISIONS OF TIME PERIODS

The year is divided by	1/8,	which	equals	6 1/2	weeks,	45	days
	1/4,	"	"	13	" ,	90-92	"
	1/3,	"	"	17	" ,	120	"
	3/8,	"	"	19 1/2	" ,	135-138	"
	1/2,	"	"	26	" ,	180-182	"
	5/8,	"	"	32 1/2	" ,	225-227	"
	2/3,	"	"	35	" ,	240	"
	3/4,	"	"	39	" ,	270-273	"
	7/8,	"	"	45 1/2	" ,	315-318	"

1 year, which is 52 weeks or 364 days

The angles run from each of the time periods for Price and Time in order to balance the Square and show resistance levels where price and time periods indicator a change in trend.

THIRD AND FOURTH DIMENSIONS OF TIME AND PRICE

We know of three dimensions, height, width and length, but there is a fourth dimension or element in market movements. We price the fourth dimension with the Master Calculator or Square of 52 in time periods of 7 days each for 7 weeks or more and the same price relation. 7 X 52 equals 364 or 7 years.

THE CIRCLE, TRIANGLE AND SQUARE

The circle of 360 degrees and the nine digits are the basis of all mathematical calculations. The square and the triangle form within the circle but there is an inner circle and an inner square, as well as an outer square and an outer circle which prove the fourth dimension in working out market movements.

PRICE

The most important points to consider are: the lowest price; highest price; the 1/2 point, mean or average between the extreme high and the extreme low. We get the fourth dimension, as shown on the Master Calculator, by drawing the 45 degree angle from the 1/2 point or gravity center, which is the most important for price resistance (Mr. Gann referred to resistance were we would use support or resistance); Volume of Sales. This is the power which drives the market up or down but remember that TIME is completed, the volume of sales starts to move the market up or down.

TIME

Time is divided into sections or cycles by which we determine the change in trend. We use daily, weekly, monthly, and yearly high low prices. The weekly and the yearly time periods are most important for trend indications and for change in trend. The day is divided into hours, minutes and seconds. The 4 divisions of the day are: Sunrise, Noon, Sunset and Midnight. Of these the most important are noon, when the Sun is straight overhead or on a 90 degree angle, and Midnight, the opposite point or 180 degrees from Noon and 90 degrees from sunset.

Because we are using 7 day time periods with the calculator, 1/2 or the 7 days or 3 1/2 days is important to watch for change in trend. Always watch the 3rd and 4th day from any important high or low level for a minor change in trend which later may become a major change.

7-day periods--The time periods of 7 calendar days from any important high or low level is of great importance. 14 days is the most important and 21 days or three weeks is next in importance. Reactions will often end 2 weeks and sometimes 3 weeks and then resume the main trend. Rallies in a Bear Market often run 14 days and sometimes 21 days and then resume the downward or main trend.

Multiples of 7 days--The square of 7 or 49 days is very important for change in trend. You can start to watch for this change after the 42nd day but the first indication of a change may not occur until the 45th or 46th day, which is 1/8 of a year or 365 days. 1/16 of a year is 23 days. Therefore, both the 46 day and 23 day periods are important to watch for change in trend.

YEARS

Later we will refer to the four seasons or the divisions of the year, which are spring, summer, fall and winter and important to watch for change in trend. However, the divisions of time are from the date of the actual important high and low prices.

The important yearly cycles are 1, 2, 3, 5, 7, 9, 10, 12, 14, 15, 18, 20, 21, 22 1/2, 24, 25, 27, 28, 30, 40, 45, 49, 56, 60, 84, and 90 which is the great cycle. We divide the cycles into 1/2, which is the most important, and also into the periods of 1/8, 1/3 and 2/3, and watch these proportionate parts of the cycles for changes in trend. For example:

The great cycle of 90 years equals 1080 months;
1/2 is 45 years or 540 months
1/4 is 22 1/2 years or 270 months
1/8 is 11 1/4 years or 135 months
1/16 is 5 5/8 years or 67 1/2 months

The 30 year cycles or any other cycle is divided up in the same way.

Multiples of 7 years--The multiples of 7 years or 84 months are all important to watch for change in trend. These are 7 years or 84 months are all are all important to watch for change in trend. These are 7, 14, 21, 28, 35, 42, and 49, which is most important because it is the square of 7. Next 56 and 63 are important, 63 because it is 7 X 9 and 81, the square of 9, is very important. (Remember as I've mentioned earlier in the text, these cycle expirations do not necessarily indicate a change in the major trend, but can mean a good tradable situation).

Yearly time periods-triangles and squares--When 1/3 of a year from any important low comes out at the same time as 1/4 or 1/2 of a year from another important top or bottom comes out, it is of great importance for a change in trend. One half of a year is always the most important, just the same as 1/2 of the highest selling price and 1/2 of the range of the price is important for resistance levels. By practice, study and comparison and by placing the calculator over the weekly high and low chart, you will see how all these price and time periods work out.

TIME, PRICE, VOLUME, VELOCITY, PITCH OR TREND

When a time cycle is completed, volume increases and the market begins to move up faster or move down faster. The pitch or trend is determined mostly by the 45 degree angle, which is the most important, but other angles can be used to determine the trend. The pitch or trend is the 4th dimension and shows whether the market is slow or fast by the angle, whether very acute or above the 45 degree angle or flat and slow, below the 45 degree angle, which causes a slow creeping market that may later regain important angles and increase the pitch of the angle and start moving up faster. All of this is shown on the Master Calculator or Square of 52.

Three ways to square or balance time and price.
1. Balance the lowest price with time measured in weeks and balance the highest price with time.
2. Balance the range, which is the total between the extreme high and extreme low.
3. Get the 4th dimension by balancing price and time in weekly time periods as shown on the Master Square of 52.

PRICE SCALES

Price scales can run up and down to 104, 208, 416, and 520, which balances out the time periods. For grains, this scale is for cents per bushel. For stocks it is $1.00 per share. The price periods are divided up into 1/8 and 1/3, the same as the time periods.

Scale for cotton, coffee, cocoa and eggs-each 1/8 cent equals 10 points. therefore 52 would indicate 520 in price and 104 would indicate 1040 for cotton or any other commodity trading in 100 points to 1 cent.

Eggs-weekly high low chart-eggs trade at a minimum of 5 points. We use to points to 1/8 inch on the daily high low chart. Experience has proven that a scale of 25 points to 1/8 inch, which represents one week in time, works best. Therefore, 52 spaces on the calculator would indicate 1300 or 13 cents for eggs; 104 would represent 2600; 156 would represent 3900; 208 would represent 5200 or 52 cents per dozen eggs, etc.

HOW TO USE THE MASTER CALCULATOR

One column on the calculator can be used for one month or one year but the calculator is designed to be used on the weekly high low chart for determining the important change in trend.

Place the bottom or "0" of the calculator on "0" below any price or place it on the low price, then you will see where the angles cross and resistance levels are indicated.

Place the calculator marked "top" at the high price on the exact date the important price is made, then you can see the important angles for resistance from the top down.

THE INNER SQUARE OF 1/2 POINT

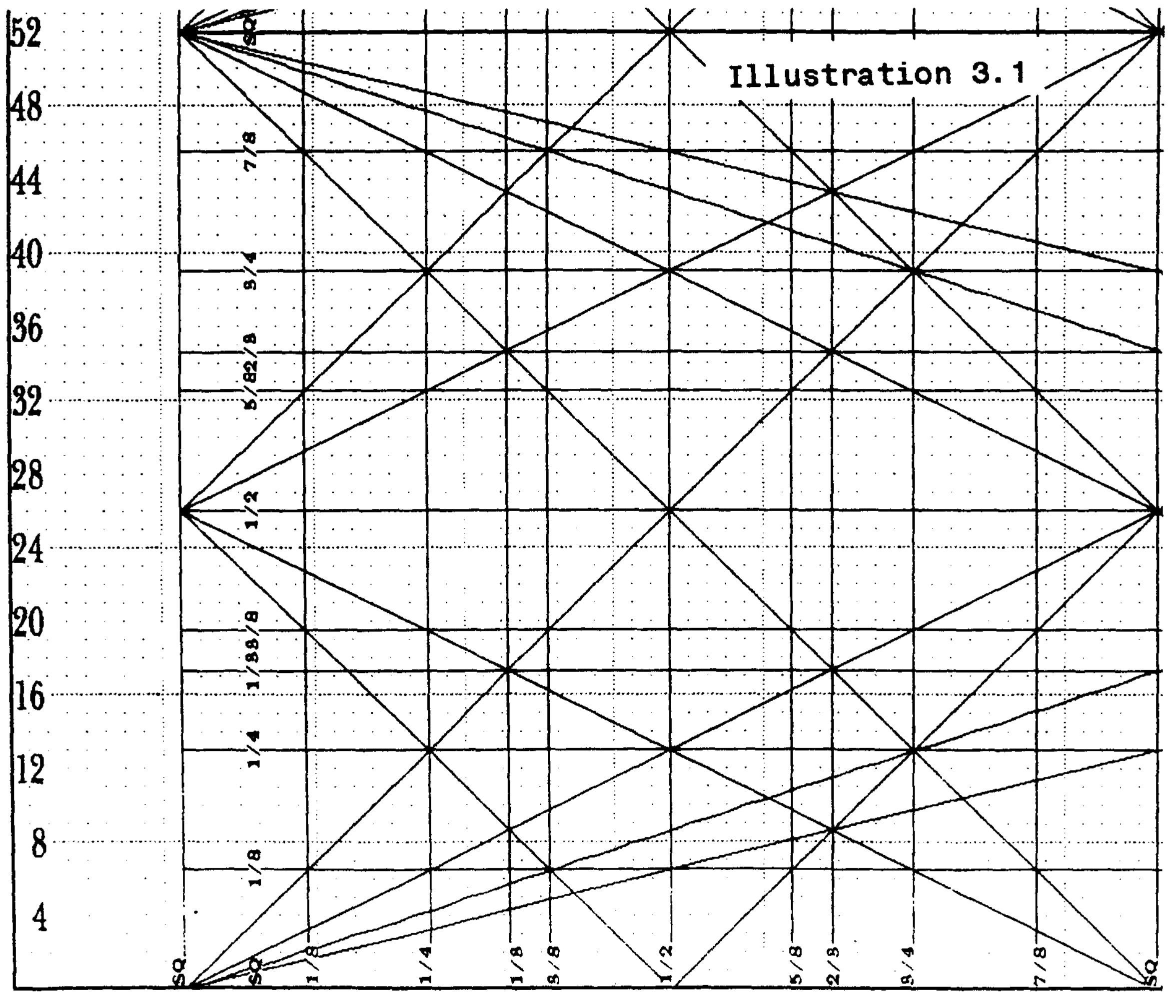
Place the calculator on 1/2 of the highest selling price or 1/2 of the range. Place the calculator where it is marked 1/2 or 26 weeks or the chart on the same line that low or high is made. Placing the calculator on 26 over the 1/2 point will show resistance and whether the price is in strong or weak position.

THE INNER SQUARE OF 45 DEGREE ANGLES

The inner square of 45 degree angles starts from 26, which is 1/2 of 52, and move up or down. It crosses at 26, which is 1/2 of 52. The 45 degree angle moving up from "0" crosses at 52 and 104 and the 45 degree angle moving down from a top or high level crosses at 52 and terminates at "0". All of these important 45 degree angles from any important high or low cross on 1/4, 1/2. 3/4, etc., as you can see, and balance out time and price.

MOST IMPORTANT TIME PERIODS

The most important time periods are the anniversary date of 1, 2, 3 years or more from the dates of the important highs and important lows. Second in importance is 1/2 of the yearly time period. Third in importance is 3/4 or 39 weeks in each year. Fourth, the 1/3 point or 17 weeks and the 2/3 point or 35 weeks are also very important time periods for change in trend." (Illustration 3.1)



SQUARE OF 90

In the materials that came with this text is a "Square of 90". This square represents one of the major natural vibratory forces in nature.

Moving up the vertical axis on the square; the first horizontal line is at 11 1/4 (1/8 division of 90); the next line is at 22 1/2 (1/4 of 90); the next at 30 (1/3 of 90) and so forth. Keep in mind these horizontal division were referred to by Gann as angles. Along the horizontal axis are lines running from bottom to top. These are time divisions and are, also, referred to as angles. At the first small square within the Square of 90, 11 1/4 by 11 1/4, is an intersection of 4 angles. The horizontal 11 1/4 degree angle, the vertical 11 1/4 degree angle, the 45 degree angle moving up from 0 and a time angle running down from 22 1/2 degrees. (Illustration 3.2)

In the appendix is a section titled "Auburn." You should study this, using the clear Square of 90 overlay. It will give you an understanding of the use of time angles.

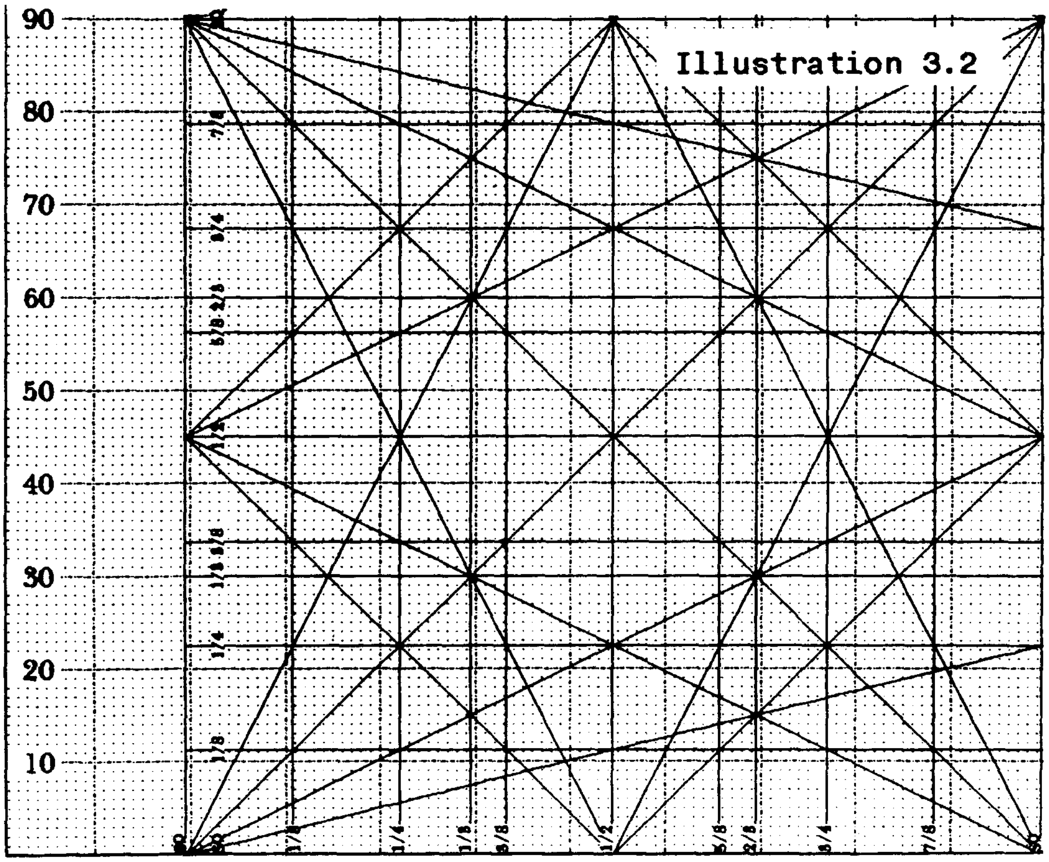


Illustration 3.2

THE MASTER MATHEMATICAL PRICE, TIME AND TREND CALCULATOR

This chart is made on transparent plastic so that you can place it over a daily, weekly, or monthly high and low chart and see at a glance the position on the time and price based on the geometrical angles. It is designed to give quick, accurate and easy calculations, thus, saving time and preventing errors.

The square of 12 is always important in working out time periods because there are 12 months in a year. The Square of 144 is the great square and works better than any other square both for time and price because it contains all of the squares from 1 to 144. This chart is divided up into sections of 9, for both time and price, because 9 is the highest digit. Nine spaces on the daily chart equals 9 days, 9 weeks or 9 months in time periods. Nine equals 9 cents on grains, 9 points on stocks or 90 points on cotton on the daily high and low chart.

One column in the square of 144 contains 144. This would equal $1.44 on grain, 144 points on stocks, or using a scale of 10 points to 1/8 inch, will equal 1440 points on cotton.

Master 144 square contains 324 square inches and each square inch contains 64 units which gives 20,736. This is 20,736 weeks or months and the proportionate parts of this are used for the measurement of time and price because this is the great cycle.

One half is 10,368 days. One fourth is 5,184 days. One eighth is 2,592 days, etc.

The great cycle in weeks is 2962 and 2 days, and 1/2 of this period is 1481 weeks and 1 day. One fourth is 740 weeks. One eighth is 370 weeks and 2 days. One sixteenth is 185 weeks and 1 day. One thirty second is 92 weeks and 4 days, and 1/64 is 41 weeks and 2 days.

The great cycle in months is 681 months and 23 days. One half of this is 28 years, 9 months and 23 days. One fourth is 14 years, 5 months and 8 days, etc. The weekly and monthly time periods from any major high and low can be checked to determine the future trend.

The importance of the circle of 360 degrees must not be overlooked in connection with the square of 144 because the proportionate parts of the circle agree with parts of 144. Examples of this are; 2 1/2 times 144 equals 360 ; 1 1/4 times 144 equals 180, 1/2 of a circle; and 90 is 5/8 of 144; 9 is 1/16 of 144; 18 is 1/8; 27 is 3/8; 36 is 1/4; 45 is 5/16 and is always very important for time and price changes, as well as, for resistance levels. Forty-eight is 1/3 of 144; 54 is 3/8; 63 is 7/16; 72 is 1/2 of 144; 81 the square of 9, is 9/16 of 144; 90 is 5/8; 99 is 11/16; 108 is 3/4; 117 is 13/16; 126 is 7/8; and 135 is 15/16 of 144. These are the most important in the square of 12 and should be watched closely when time periods in days, weeks or months reach these points on the Master Calculator. Remember that you should always watch the daily chart for the first indication of the change in trend, while at the same time, look at the position on the chart or 7 day time periods which is next in importance. The monthly chart is of the greatest importance for change in main trend.

THE IMPORTANCE OF 3 AND 5

The movement in price and time whether on a daily, weekly or monthly chart has three important points; the price , the time and volume of sales. The pitch or trend which is the geometrical angle which shows whether time is influencing and driving prices up or down on a slow angle or an acute fast moving angle. There are also four factors that influence prices, price, time, volume and velocity. Time is the most important factor because, when time is up, volume increases and velocity or speed or the market increases and the pitch or trend on the angles moves up faster or down faster.

There are three other important points to consider on a daily, weekly or monthly high and low chart. These are the low price, the highest price and the range or 1/2 between the high and the low.

FIVE FACTORS FOR TIME AND PRICE

These factors are high, low, halfway point, and opening and closing prices. The trend is indicated by the closing price, especially when the market is very active. If the price closes above the halfway point or near the high, the trend is up. If it closes below the halfway point or near the low, the selling is greater than the buying and the trend is down, at least temporarily. In connection with the Master Time and Trend Calculator, apply all the rules with the Master Time Factor and geometric angles.

STRONGEST POINTS FOR TIME AND PRICE RESISTANCE

In using the Master Square of 144, the strongest points are 1/4, 1/3, 2/3, 3/8, 1/2, 5/8, 4/4, 7/8 and the complete square of 144. The points where the most angles cross are the strongest for resistance in price and time.

The triangle points or where the green angles cross are the most important. These are 36, 48, 96, 108, of course, 72, and the end of the square of 144- at the top and bottom. When the price is at a point equal to 36, and the time periods in days, weeks or months is at 36, time and price is equal. It is important to watch for change in trend. With the square of 144, you can get any square from 1 to 144. Suppose you want to get the square of 72. Move across to 72 for time, and if the price is moving up on the chart at 72, price and time have balanced (or squared out) and are at the 45 degree angle. Therefore they are at the halfway point on the Master Price, Time and Trend Calculator.

WHERE TO WATCH FOR CHANGE IN TREND

Most changes in trend occur when the time periods are at one half of the square of 144, at the end of a square, or at the 1/3, 2/3, 1/4 and 3/4 points in the square of 144. You must always watch the square in time of the highest price and the minor highs and lows. In addition, look for the square in time of the lowest price and the second or third higher bottoms, as well as the time required to square the range and where this square works out in the Master Square of 144.

Example: The lowest wheat ever sold was 28 cents per bushel, in March, 1852. Therefore, every 28 months would square the lowest price. The highest price that wheat ever sold for was in May 11, 1917 when the May option sold at 325. Hence, it would require 325 months to square the highest price. The lowest price that the May option ever sold was 44 cents. Therefore, it would require 44 months in time to square the low price. The range between 44 and 325 is 281 cents which would require 281 months, 281 weeks, or 281 days to square the range. You would look on the Master Chart and see the 2 squares of 144 equal 288, and would watch for a change in trend between 281 and 288 or near the end of the second square of 144. The extreme low, 7 X 44, equals 308, therefore, 6 1/2 times 44 would equal 286, which is within two points of the end of the square of 144 or the end of the second square, thus making 286 an important time period to watch for a change in trend. In squaring the range of 325, the highest price for May wheat would be 2 squares of 144 and 37 over, so when the time reached 36 days, weeks or months in the Master Square of 144, you can see that resistance would be met. You see this because, moving up the time period of 136, you see the 45 degree angle moving down from 72, which is the inner square. The line drawn across from 36 on the price scale crosses at 36. In this way you can see that the Master Chart would indicate a resistance in time and price corresponding with the square of the highest price, the lowest price and the range. All other time periods from a high price, low price, or the range of any commodity, stock averages or individual stocks, should be worked out in this same way.

You will succeed in using the Master Mathematical Price, Time and Trend Calculator by going over the charts and laying the calculator over them and working out past history. In this way you will learn just how it works and prove to yourself the great value of the Master Calculator.

HOURLY TIME PERIODS

When markets are very active and making a wide range in price, it is important to keep an hourly high and low chart. Do this in the same way as you keep the daily high and low chart. The hourly chart will give the first change in trend. There are 24 hours in a day, therefore, 6 days are required to pass through 144 and a total of 864 days to pass through the square of 144. At the present time, all exchanges are open 5 days a week, with the exception of holidays, and most of them are open 5 hours each day. Therefore, it will require 28 days and 4 hours to pass through 144 at the rate of 5 hours per day and 5 days per week.

GREAT YEARLY TIME CYCLE

To pass through the square of 144, which equals 20,736, it requires 56 years, 9 months and 23 days, which is very important time cycle. Next in importance is 1/2 of this period which is 28 years, 5 months and 8 days and 1/4 which is 14 years, 2 months and 19 days. The 14 year cycle is always very important because it is 2 seven year periods. Fourteen years equal 168 months and 169 months is the square of 13 making it very important for a change in trend and this is also an important time resistance point. One-eighth of the Great Cycle is 7 years, 1 month and 10 days and is quite important. One-sixteenth is 42 months and 20 days, 1/32 is 21 months and 10 days. This is an important time period because it is close to 22 1/2 months which is 1/16 of the circle of 360 degrees.

GREEN ANGLES

The green angles are the angles of 2X1 which move up 2 spaces or 2 points in one period of time. The other angle below the 45 degree angle is the angle of 1X2 which requires 2 time periods to move up 1 space or 1 cent per bushel on grains for each time period of 1 day, week or 1 month. These angles move down from the top at the rate of 2 points or 2 spaces per time period or at the rate of 1/2 space, 1/2 point or 1/2 cent per time period. The distance that the green angles and the red angles are apart determines how far prices can advance or decline.

When the market enters the inner square, it is important for a change in trend. Time angles and the market's position in the square tell, at the time it entered, whether the price is going up or down. Also, when the price breaks below the 45 degree angle on the inner square it shows weakness in proportion to the time from high or low price.

HOW TO USE THE MASTER SQUARE OF 144

Follow all rules and angles as given in the Master Forecasting course.

Place this chart at the bottom, or 0, or the bottom of the chart on the low price, or on the square of the high price, or the square of the range on the daily, weekly or monthly charts.

When you figure the halfway point of the extreme high or the halfway point of the range, place either the top or bottom of the chart on the halfway point and it will find the correct position and trend. However, if you will place the center, or 72, on the halfway point in price, you will get the correct position in time. You can see how the price is working out with time in the Master Square of 144 and the inner square which starts from 72- the gravity center of 1/2 point of the square. (Illustration 3.3)

On Illustration 3.4, point (A) is fifty percent price and time. Point (B) is the full square of 144, in both price and time. Note that even though price went above 144 points during that week, price and time did square out. Another point to note is, the low was 216, which is 144 plus 72. Therefore, when price hit 360, it was at an obvious resistance level at point (C).

I've found 144 an excellent tool on monthly charts. I've found this vibration on most daily commodities and currencies charts, and seldom on individual, daily stock charts.

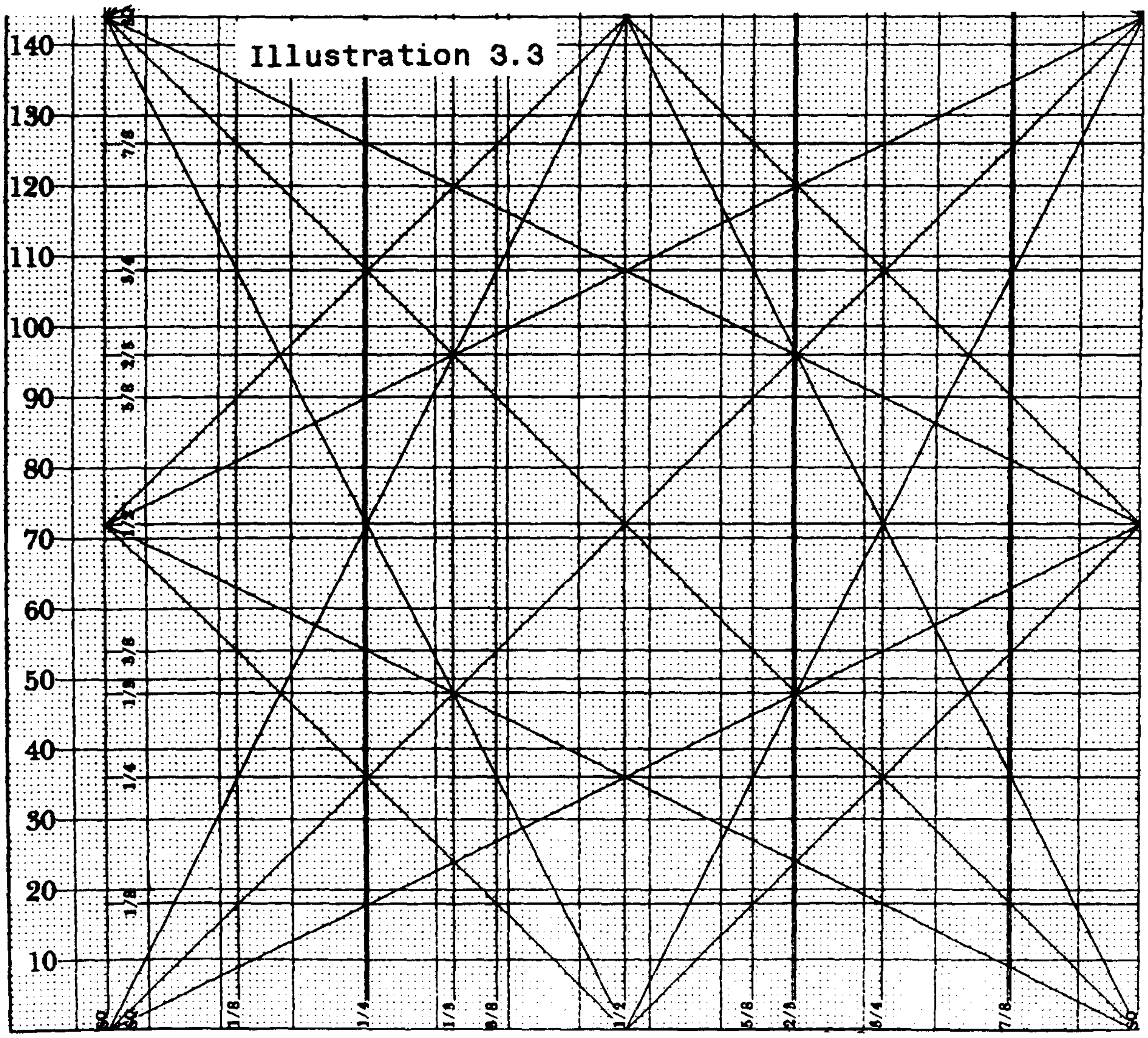
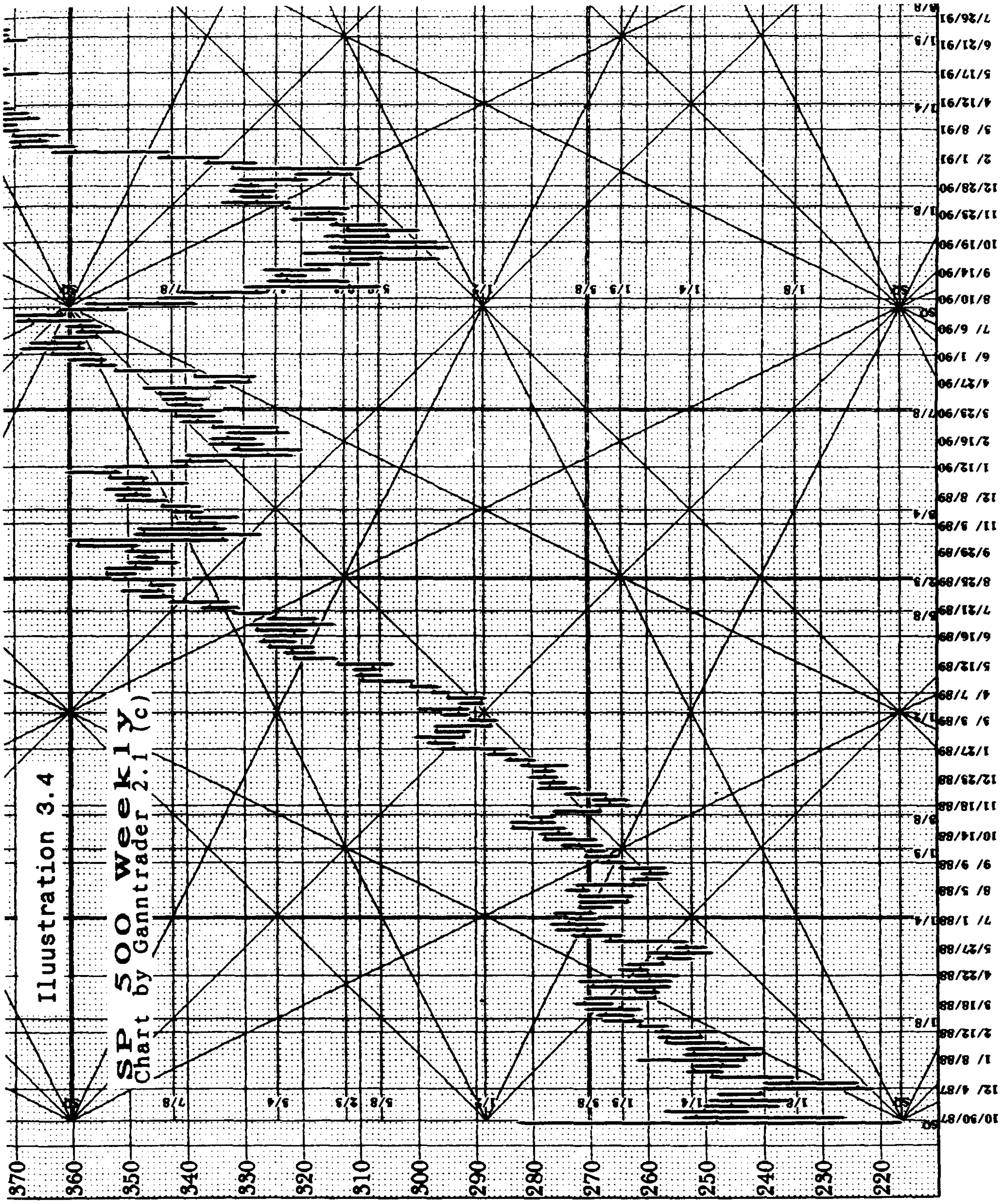


Illustration 3.3


Iluustration 3.4
SP 500 Weekly
Chart by Ganntrader 2.1 (c)

SQUARE OF THE RANGE

"Everything that trades makes a top or bottom on some exact mathematical point in proportion to some previous movement." According to Gann, the square of range is the most powerful of the price squares. This particular method of finding time periods to look for change in price action is truly exceptional. Again, you can find the important time and price levels of the square of a range by taking the 45 degree angle up from the last low, and when it reaches the level of the last significant high, that is the square, or alternatively, from the last high down to the previous significant low. That is a square of the range of movement from the high to the low or from the low to the high.

You will find on a normal weekly or monthly chart that ranges square out often, and will give you some excellent trading opportunities. The square of the range is very important on the weekly charts from the significant swings in the price of a stock. If you look at weekly and monthly charts, the significant range in any particular stock will be clear. This will help your work on the daily charts.

Bottoms above 50 percent of the range indicate that the stock is holding a strong position. Gann said, if you get a good bottom just above the 50 percent of range mark, that the stock or index is in a strong position for a rally. Divisions of significant ranges in price and time, in high priced items, can be very exact. Many times these high priced items will not hit a top or bottom unless it is on a division of a range. But, when you see that, look for additional trading evidence before placing a trade from a price division. Any time a stock or commodity or index bottoms at fifty percent of the range of the last movement, you have a doubly good reason to look at the other divisions of that range as being important.

Never neglect to draw angles from 50 percent of the range to determine support or resistance. They can help qualify weak or strong positions. In addition, an angle drawn up from the low price at the time of the high is what Gann referred to as a true trend line. This can obviously be drawn down from the high price at the date of the low. Illustration 3.5 and 3.6 shows true trendlines indicated with "TT".

Until you become well aquainted with this analysis, I would suggest that you keep a calendar day chart on some items, as well as a trading day chart.

If price moves out of that square of the range, the next high or low will likely be in proportion to a previous range. Usually it will be in 1/2 or 1/3 proportions. The method Gann used to keep track of the previous price ranges is shown in Illustration 3.7.

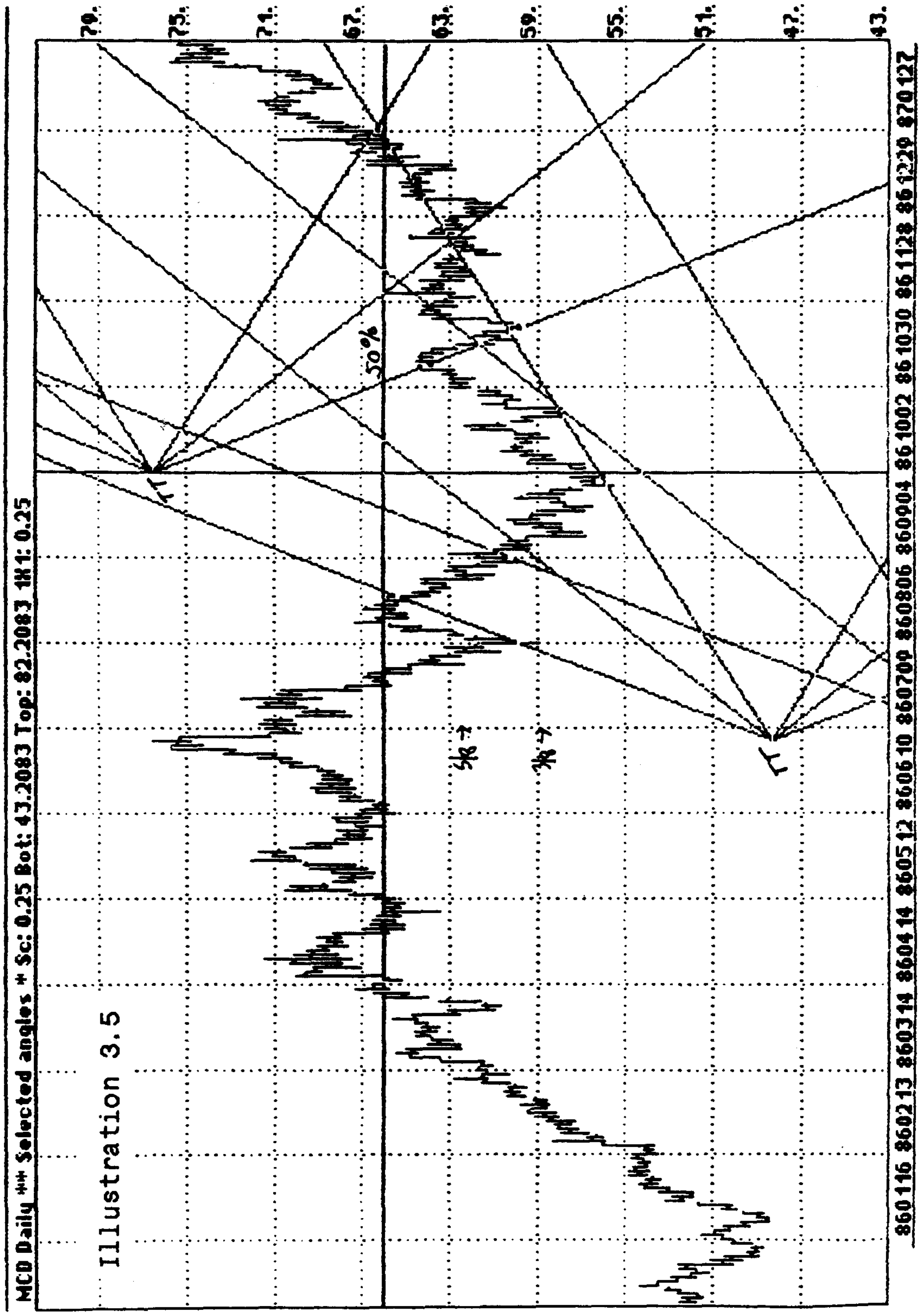


Illustration 3.5

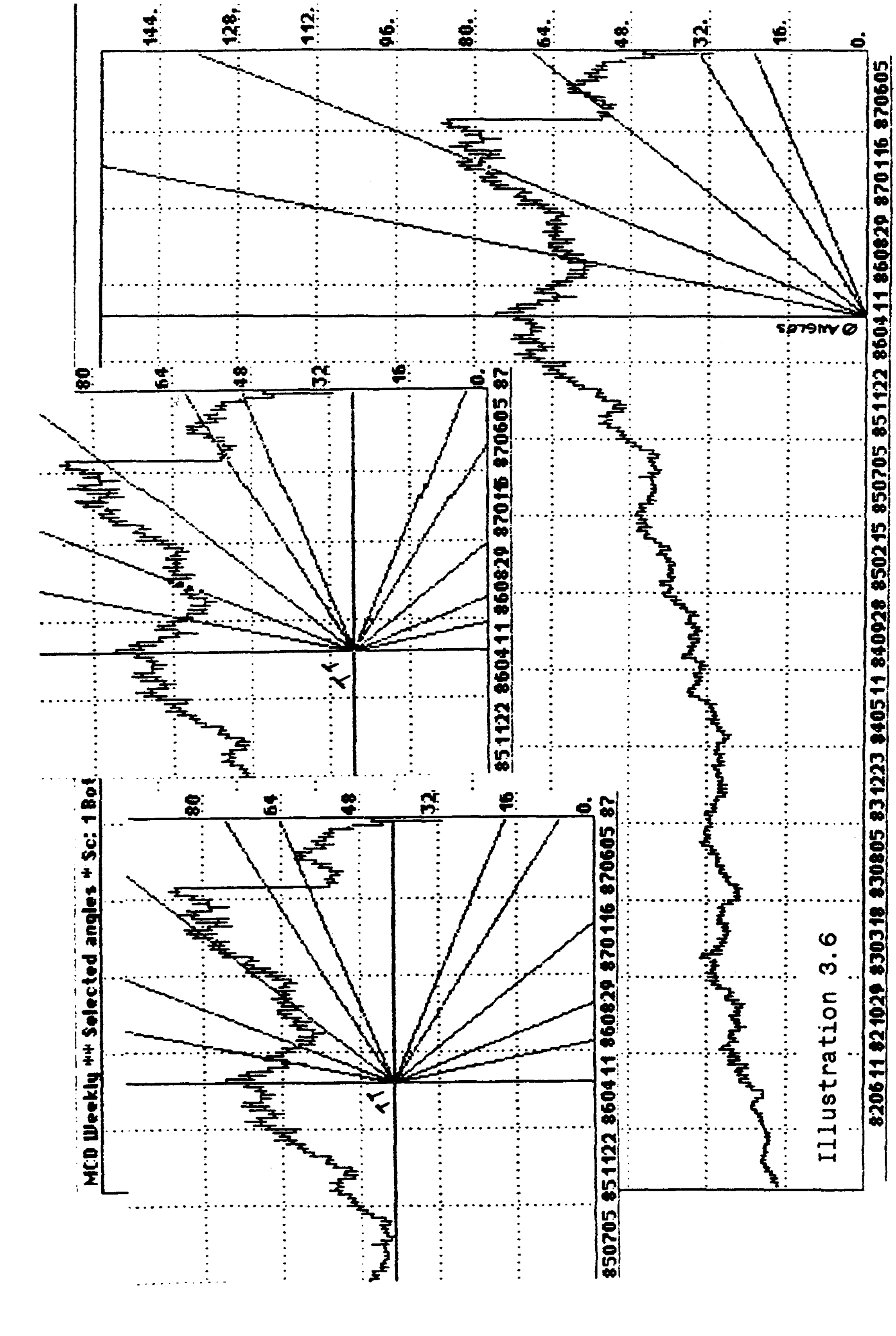


Illustration 3.6

Illustration 3.7

NAME **Inc.**

YEARS		19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......	19...... to 19......
PRICE	HIGH LOW																				
	⅛																				
	¼																				
	⅓																				
	⅜																				
	½																				
	⅝																				
	⅔																				
	¾																				
	⅞																				
	0																				

SQUARE OF THE HIGH

For the square of the high, you use the highest price which the stock, index or commodity has attained. If the high is back in the 1960's, and you have lower highs in the seventies and eighties, use the most recent high in conjunction with the highest high in 1960. Don't try to use half a dozen highs and their multiples, as it will be confusing. However, you should watch all squares of highs and lows and ranges as they square out for the first time, or as one half of their square comes out for the first time. These are important time periods for all markets. I will add to this by saying, if you have any significant high or low, the highest high, or the lowest low, in any decade, or even any five year period, you should watch the multiples of the high or low price square out in time, and be aware of it. If they are exceeded by a new high or low, they become less important in price squares (but they are still important on the cycle of years basis).

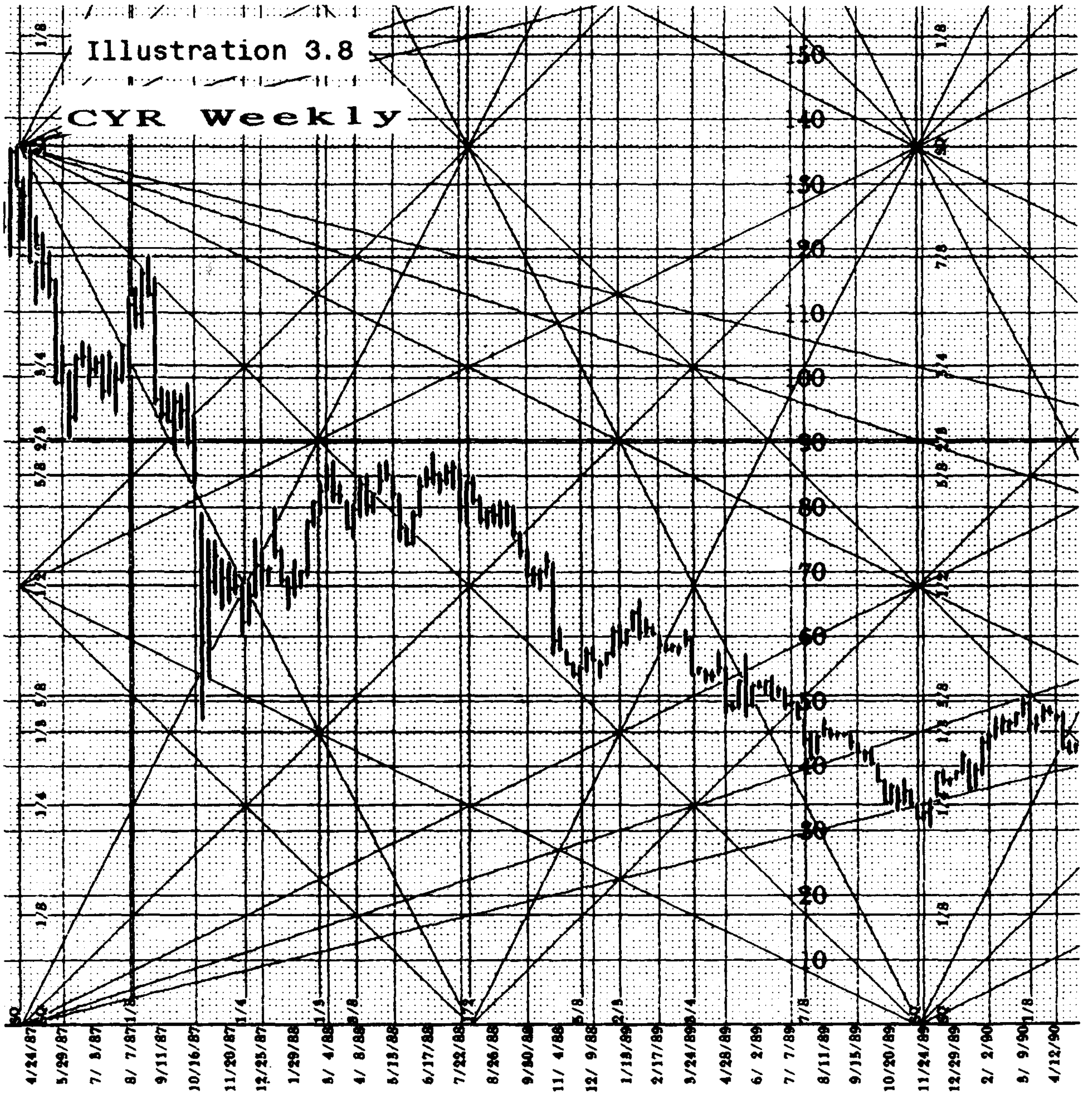
On a monthly chart you will find that when the square of a high comes out in time, you are generally looking at the end of a bear move. If that high price hasn't been exceeded, then price action can be qualified as bearish inside of that square in time. The same is true of the weekly chart. If you have a situation where the price action doesn't go into a severe bear trend and stays above fifty percent of the high, then you may see a new high within the square.

As far as trading is concerned, if you are short a stock, and price comes down to fifty percent of the high price, you may want to close out your short position. Very often that price level will stop the move. That does not mean that when that price is reached you should go long without first doing a complete analysis. If price moves through fifty percent of the range, the next stop is usually fifty percent of the high.

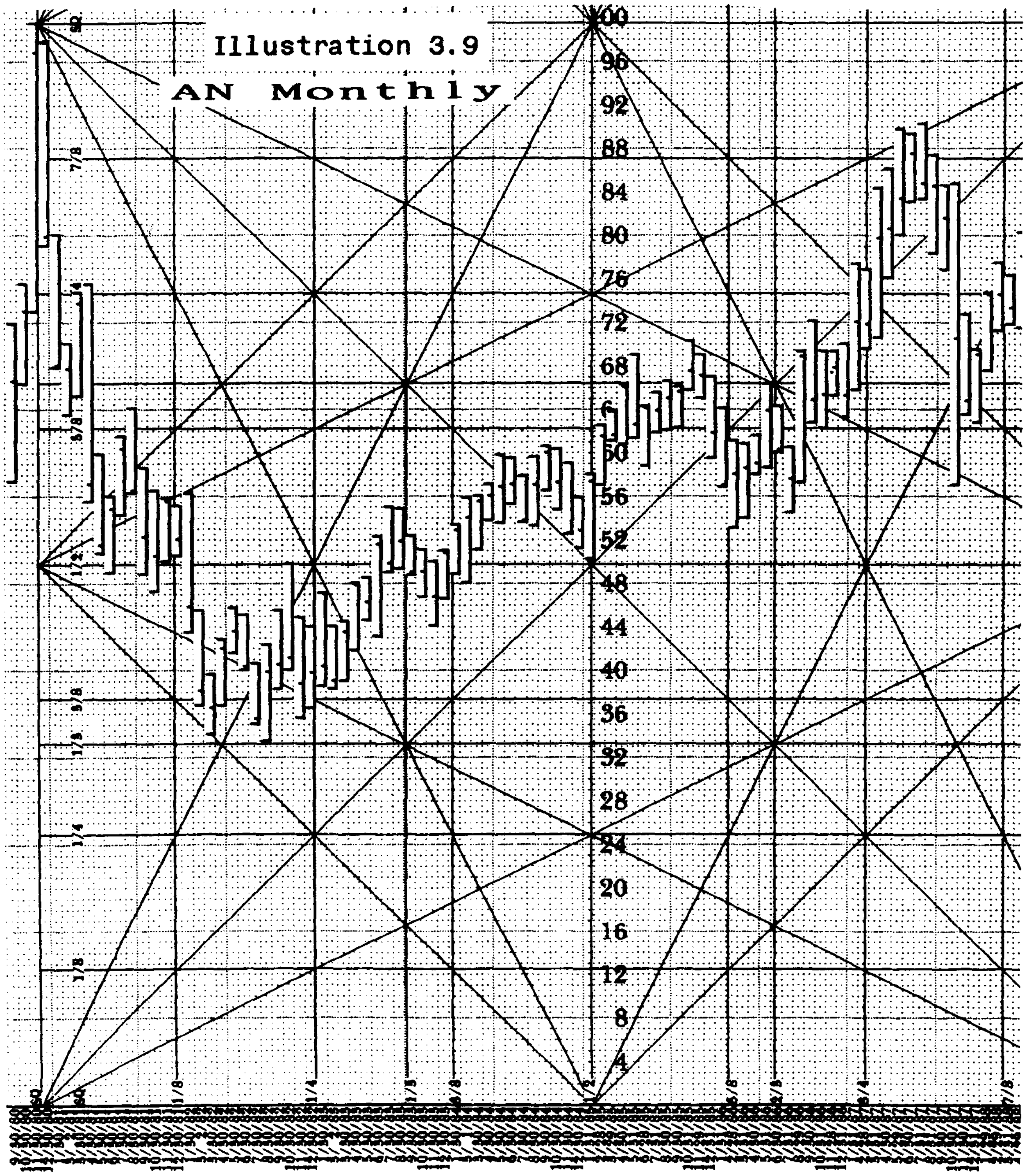
You should always know where fifty percent of the highest price is. Mark it on your charts, because it will come into play some time in the future. Also, it is very important to draw angles up from those fifty percent marks.

When price breaks fifty percent of the high price, it can be qualified as in a very weak position, and you should be very careful trading from the long side. And, if the market trends down after that break, then the first time price comes up to that level, it is a high probability short sale.

The square of the high is important in time always, but the divisions in horizontal price support become especially important after price has broken through 50 percent of the previous range of movement. In other words, use the square of the major range for price support levels until fifty percent of that range is broken, then use the square of the high, price support levels. The square of the high has its best application in severe down trends. But if a market comes down from a high with a large correction, and the low and subsequent counter trend move are exact divisions of the square of the high, then you have a very good indication of a severe trend down. (Illustration 3.8 CYR)



The square of the high has an exceptional setup, when 50 percent of both price and time come out together, or when the full square in time comes out with 50 percent of price. Of course on a monthly chart this becomes very powerful.
(Illustration 3.9)



The United Airlines chart shows a strong move down. (Illustration 4.0) Support is shown at fifty percent of the high in price, but price is at this level long before fifty percent of the high in time, and it breaks that level. Look at the movement of price down from the high. One, two, three months down, and then price moves sideways with three bottoms at 50 percent of the high. Again, this is all taking place before fifty percent of the high price in time. In fact, the test of the 5/8 resistance occurs at 1/4 of the high price in time, and a three month down move results which breaks the fifty percent price for the first time, on the fourth test of that zone. Finally, price moves down for three months into the April, 1980 low.

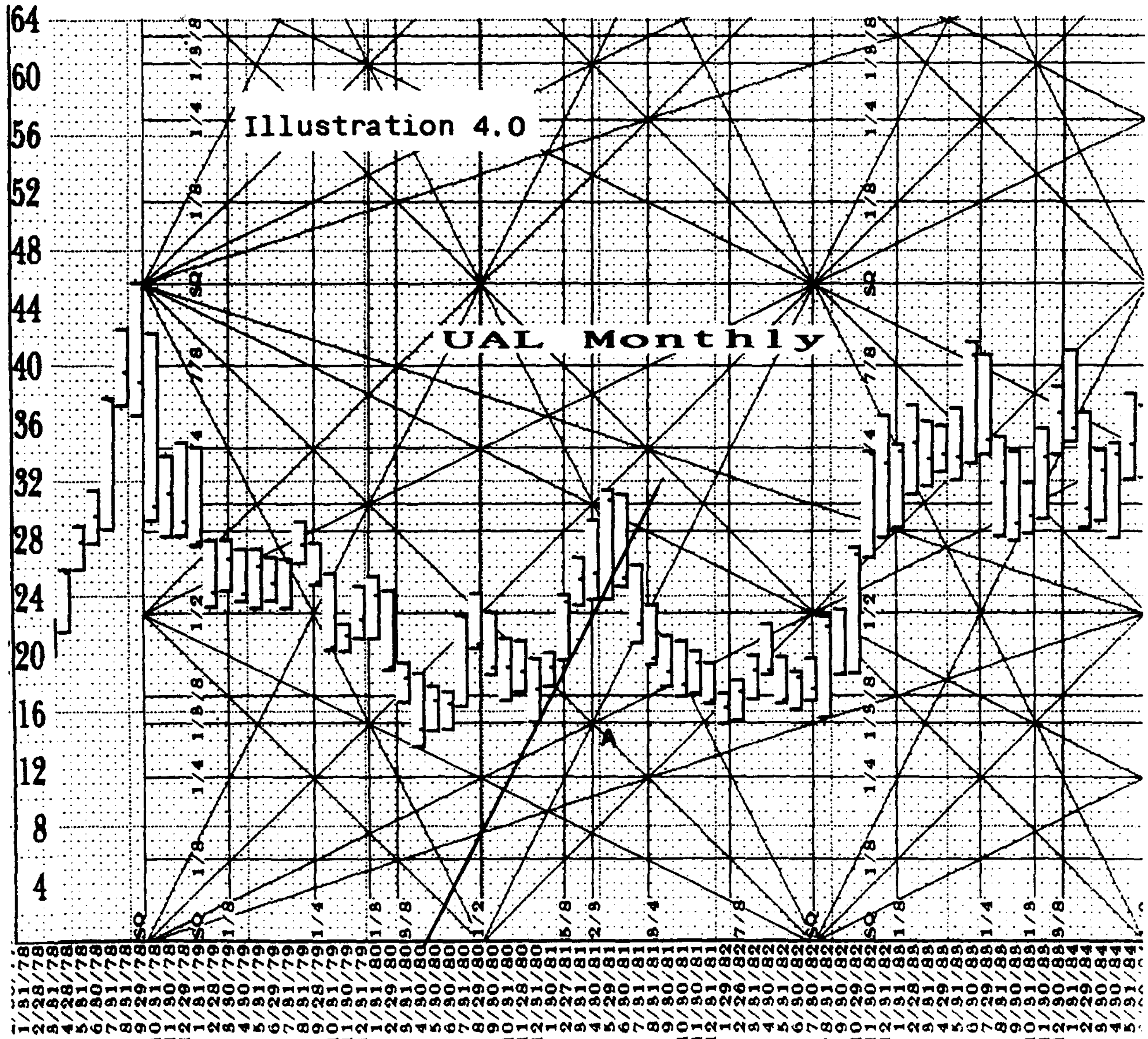
From the low in April of 1980, price rallies, and moves back up into the level of 50 percent of the high price in August of 1980. Of course, this is also 50 percent of the high in time, and a true setup. Price has been moving up, so, sell short. Possibly you want a little added evidence, so you add in the fact that price made a high one year ago in August. This is a setup, and you can look for a good three month move down, probably to the 3/8 point of the square of the high at that time. It isn't that this is what exactly happened, it is that you can expect that type of a move, and you can trade it.

Price does not move down quickly as you might have expected for a weak stock, and reasonable support is coming into the market at 3/8 of the high price, when, in December of 1980, price moves quickly down to the 1/3 of the high price. At that same time, a 2X1 angle up from zero from the date of the low crosses the same price level.

Again, one of the rules that Gann taught is that if price finds support on a fast angle, you will get a fast move. This is true of resistance angles down, also. This is not to say that price won't give a fast move from a slow angle, but it is much more probable that a fast move will result from the fast angle. Price moves up for 6 months, through fifty percent of the high. The significant low after the high is the one which the angle from zero is based. However, you would, also, have zero angles from the high in August of 1980, and possibly others.

June of 1981 gives an inside month. This is the sixth month of the move up, and the support from the 2X1 angle from zero is being tested. If you were to go to the daily chart and find that on the 180th day that price showed a top, or a lower top, that is a good indication that the six month move could be over and that the trend could reverse down. Again, here is a good setup on this chart.

From the low at 13 1/2 in April of 1980, 13 months later, or the square of the low in time, is May of 1981. That, in itself, is an indication. You will note that at that time, price reaches the 1X2 angle down from high, and is at two thirds of the high pride and two thirds of the high price in time in May of 1981, which could be considered a turning point. So, you have a turning point from the square of the low, and at what should be resistance in price and in time from the square of the high. You should then go to the daily charts to locate the shorter, cycle expirations and possible other resistance level. For instance, on the square of nine thirteen to 31 is 360 degrees, and the 180 day cycle didn't expire until a few weeks later. In addition, there was a significant low at 13 in December of 1974. So, when the 45 degree angle from the high crossed the price level of 13, the range of movement from 1974 through 1978 was squared out. This occurred in May, 1981 (Point A). That range from 13 to 45 3/4 was 32 3/4, and fifty percent of that range was 29 3/4. Therefore, in May of 1981, a major range squared out in time, while price was at fifty percent of that range. Just as with this exercise, you will find that a majority of the time, the further you analyze the situation, the more compelling the evidence will be, if a trade is justified.



On the General Motors monthly chart (Illustration 4.1), the fifty percent of the high price, and fifty percent of time setup, which price moves into nicely. This is not an unusual occurrence. When that price and time hit, you can position in the opposite direction of the trend, and count on, at least, a three month move against the trend from the monthly charts. In this case, the move lasts for a longer time, and you could play that by moving your protective stops up. However, you would have to keep in mind the resistance at 5/8 of the high, and on the 1X2 angle down from the high.

Count the months of moves on the GM chart. Most of the money is made in three months. They sometimes last four months, and sometimes six months. But, the three month fast moves are where the money is made. You should always be aware of the situation when price is up (or down) for 90 or 120 days.

Maybe in February of 1979, the market is starting to move and you are looking for something to buy. Notice that GM is twelve months from the low of February of 1978, six months from the high in August of 1978, price and time are squared out on the 45 degree angle down from top. You are at 2/3 of the high in price and 1/3 of the high in time. You have held support for four months. When the two by one angle down from the August high is taken out, price is already above the 1X1 from the high and in a strong position from top. You could look for a long trade here.

In February of 1979, price breaks down through the level of the previous bottom, and often times a fast move up will result from a false break down in price. Fast moves down, also, will result from a false break out to the upside in stocks. Once price has broken down through a bottom (this is much more apparent on the daily charts), and then recovers that level, you can look for a strong move up. This is not a setup, but just a general rule of price action.

Next, we will study the Amoco monthly chart (go back to Illustration 3.9). This stock went through a very hard sell off, and didn't break through the 2X1 down from the high until April of 1983. After overcoming that angle, the price moved up to test the fifty percent level, breaking through, and failing, then breaking through it, again. One-half of the square of the high came in January, 1985, and price sold off for three months into that time and was at fifty percent of the high. Again, this is a setup. Price comes down and finds support on the 45 degree angle up from zero. Price is already above the 45 down from top, and in a strong position. How many times can you expect to see this? Often! Now, the question here is, if you knew that you had this setup, would you have the confidence to position?

I might have looked for a long position in the month of June of 1981, because I always look for support to show at 50 percent of the high, and the first time against that price level. Of course, the 2X1 angle down had not been broken, so this would be a high risk position. On this stock, price did break the fifty percent of the high level on the third time against it. The third time

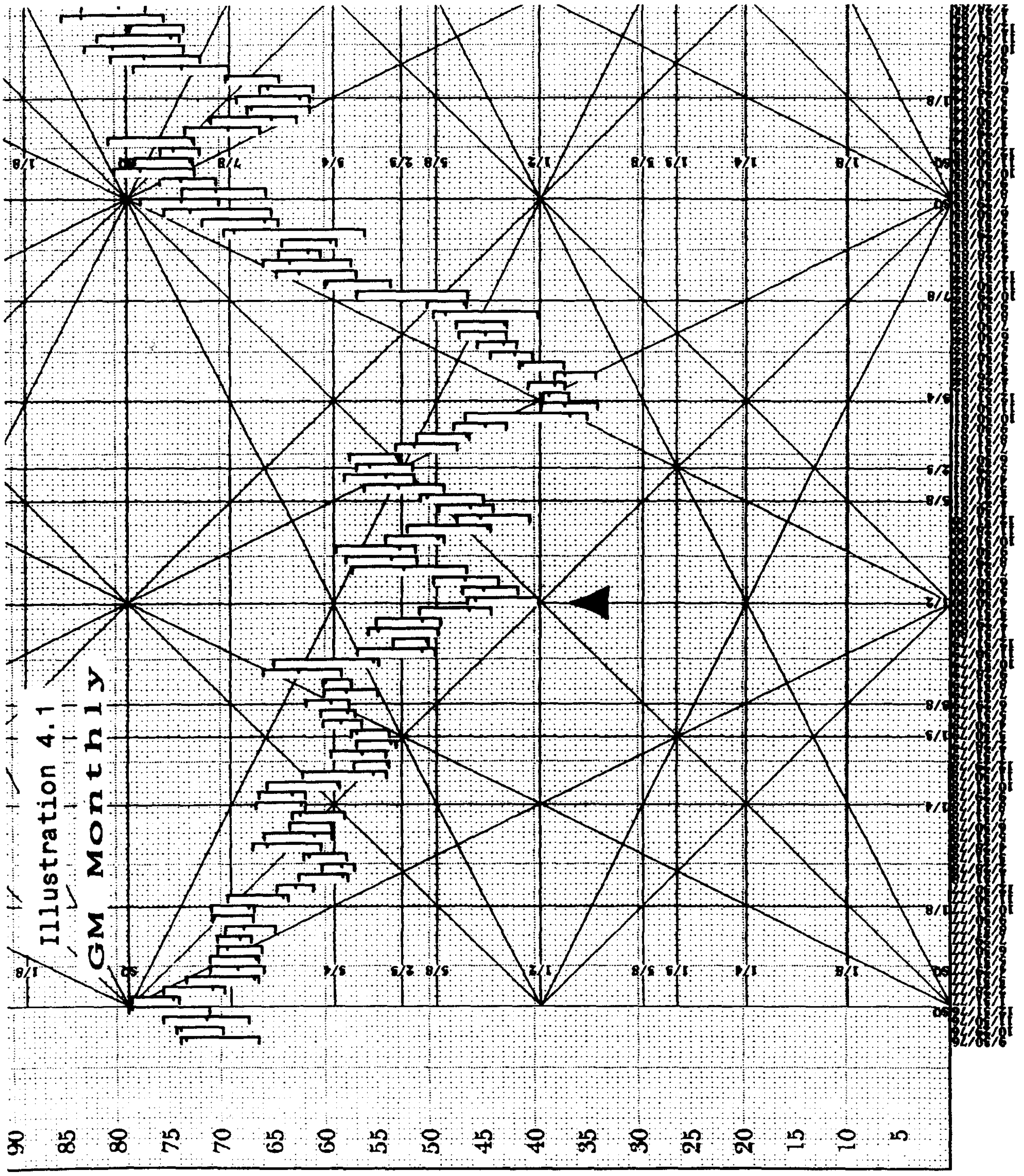


Illustration 4.1
GM Monthly
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5

against any support or resistance zone is the dangerous time. It could go either way. If price fails on the third time against a support zone, a fast move will occur very often. You could have been prepared to take that trade here.

Let's move on to the United Technologies's monthly chart (Illustration 4.2). This stock hits fifty percent and shows support, then moves through fifty percent of the high in time, and corrects down into the 45 degree angle up from zero. It is above the 45 down from top and in a strong position. You would be looking to buy this stock when price came down to that angle. That is the key. Buy when price reaches the level of the proven angle. You can use that in a down trend, also. Sell, when a proven resistance angle is touched.

The 1X2 or slow angle from the low on this chart provides the support for the move up. Many of the bottoms fall on that angle. When that angle has been proven, that is support has been shown, then you want to pay attention to it. If you draw a 1X2 up from the top in June of 1983, you have a channel, and the first time price exceeds the upper side of that channel, it corrects back down.

Notice, during the October, 1987 crash, how support was found at fifty percent of the August, 1987 high. At the time of the crash, the lows of many stocks were at fifty percent of the high.

In summary, the combination of angles and squares can be a very powerful method of determining when to trade. The best use of this is to find an exceptional setup from the monthly charts, and then go to your weekly chart to determine the week to trade. Find the most likely turning point week. They are often very clear. You may have a setup with time being 45 weeks from a top, 13 from a bottom, and a square of a range or fifty percent of a square, or a similar combination.

Then go to your daily chart and find the most likely daily turning point within that week. When you find that date, you can either take the trade on that day, or set up a price activation to put the trade in, and let price prove the setup before trading. If you have the discipline to restrict your trading to that type of setup, starting with the monthlies and then migrating to the weeklies and dailies, you will probably exceed 80 percent accuracy in your trading.

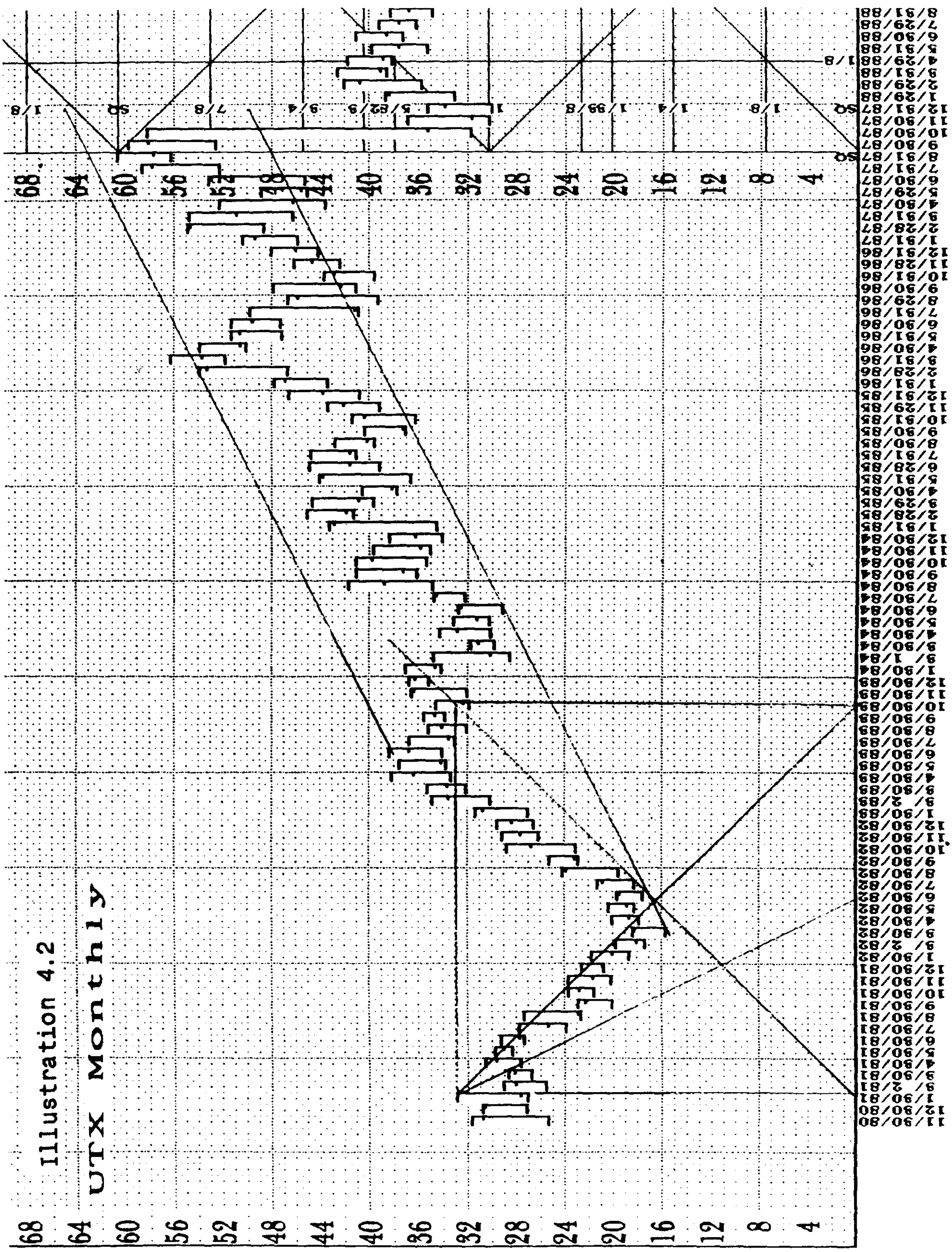


Illustration 4.2
UTX Monthly

SQUARE OF THE LOW

The square of the low is a significant time period to add to other evidence in looking for change. Let's say that a stock has a low of 13. When thirteen months from the time of that low is reached, it is important to look for evidence of a change of trend in that time period. This is especially true if the price is back at 13, since price would be against the 45 degree angle from zero. I use the square of the low for two major purposes. The first is for finding the timing from a significant low. The second is to look for resistance at 1 1\2 times the low, and 2 times the low price and so on. If the low is a high number, over 90, then I will also look at geometric divisions of that number. If the last low was 20, and price is moving up from that low, resistance should be present at 30, and then again at 40.

This is somewhat simplified, but you can use multiples of a low price to look for price resistance, and multiples of the low price in time to look for time resistance. Look at Illustrations 4.3, 4.4, and 4.5. These are of the S&P 500 Cash Index. The significant low in August, 1982 is 101.44. The squares on these charts are the square of the 101.44 low. On Illustration 4.2, Point (A) is 1\2 the price and the full square of time in weeks (July, 1984). On Illustration 4.3, Point (B) is 1 1\2 in time (July, 1985), and Point (C) is 1 1\2 in price and the 2nd square in price (July,1986). On Illustration 4.4 Point (D) shows the 3rd square in price (April 1987). These points by themselves may not have been obvious points to trade. But, if you look at the daily charts, you'll see obvious reasons in time to look to trade and by adding this square of low to the analysis, you would have been very encouraging.

The 1st, 3rd, 4th, 7th, 9th and 12th squares are the significant squares of lows but all should be monitored. Again, the squares of the low should be used with other timing techniques. One obvious setup is to have price at three times the low in both price and time. So, that in the above example of an item, with a low price of 20, the price of the stock would be at 60 in the 60th week or month from the low. Of course, 60 months would be a five year cycle.

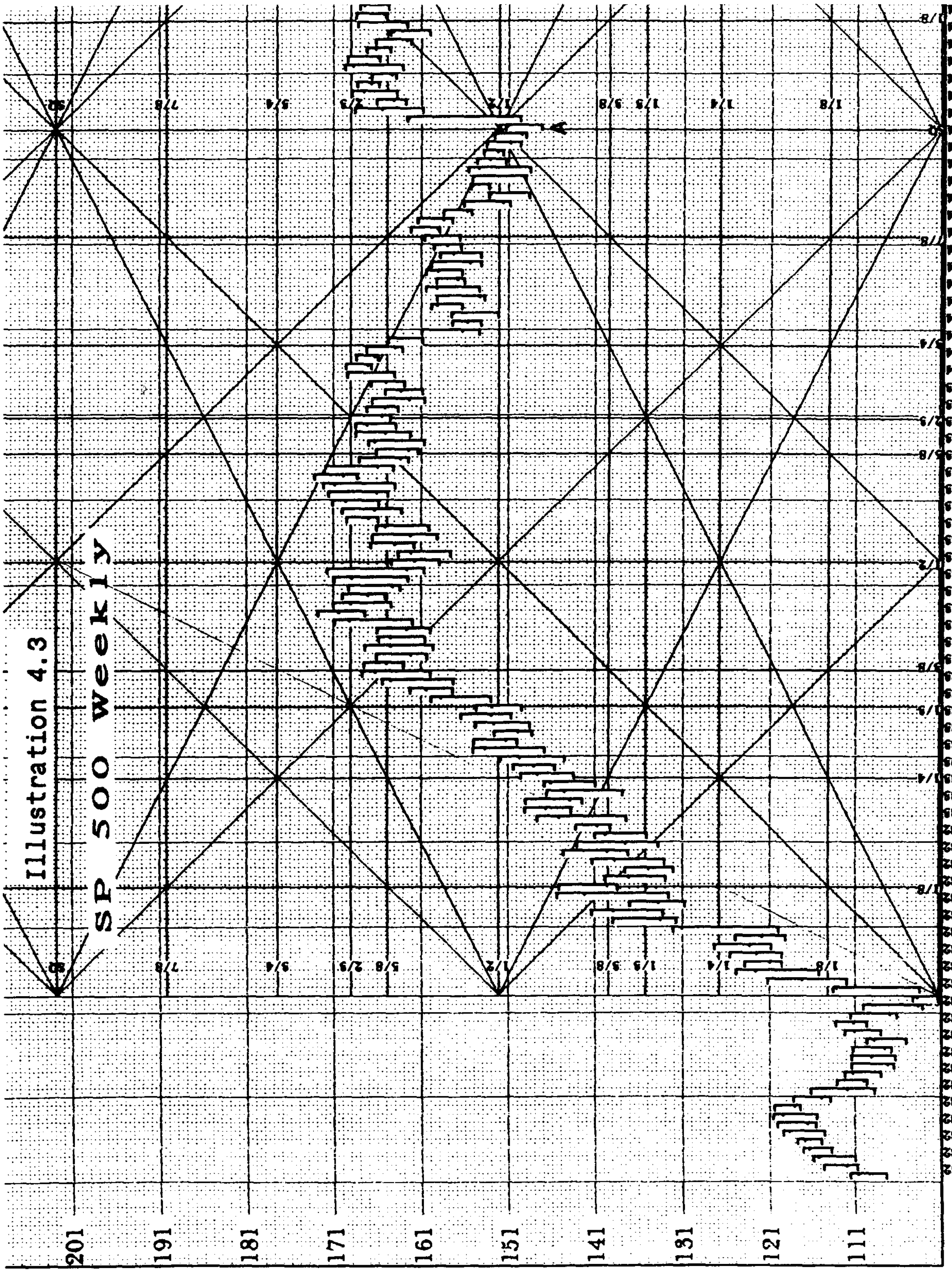


Illustration 4.3
SP 500 Weekly
201
191
181
171
161
151
141
131
121
111

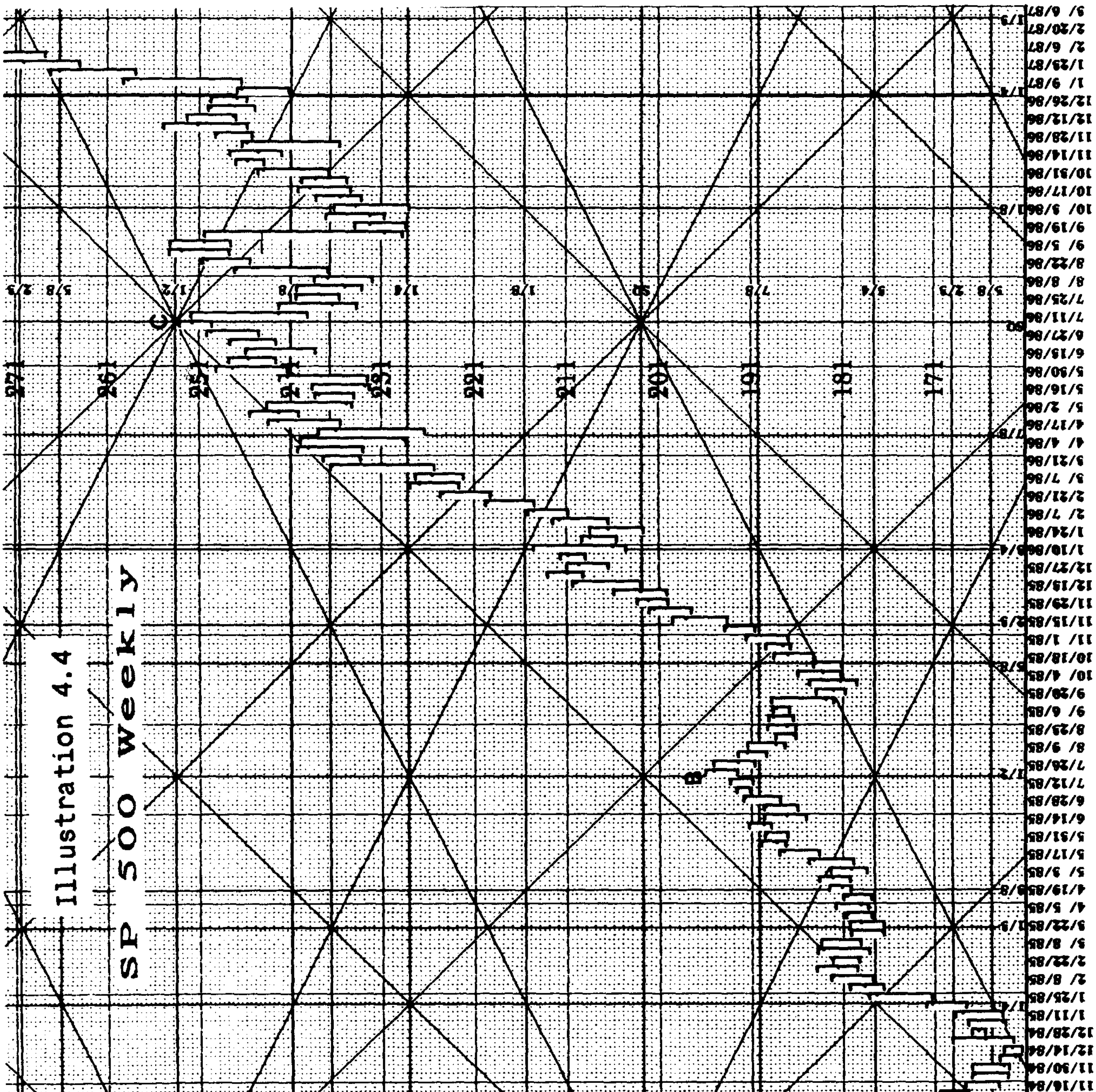


Illustration 4.4
SP 500 Weekly
271
261
251
241
231
221
211
201
191
181
171

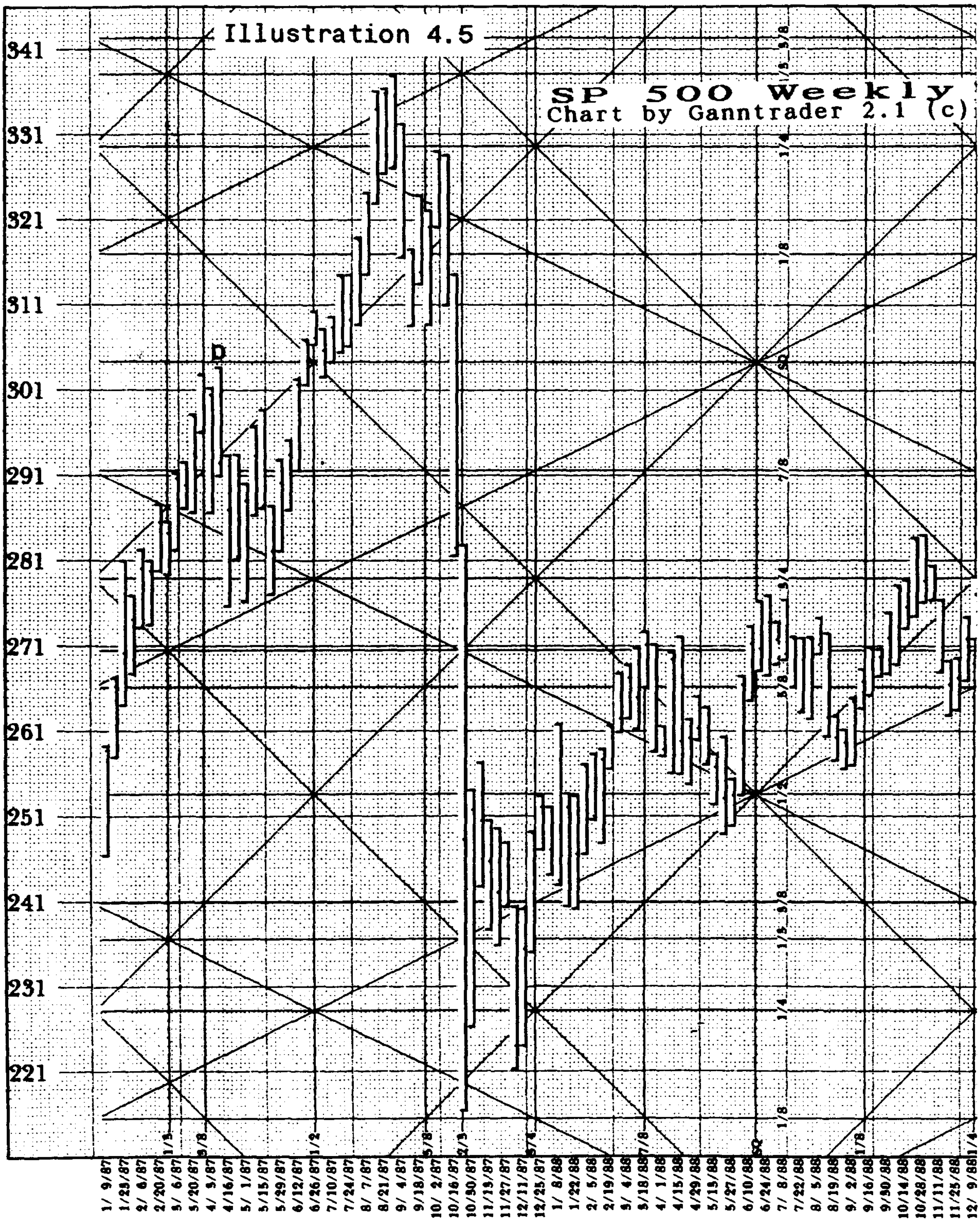


Illustration 4.5
SP 500 Weekly
Chart by Ganntrader 2.1 (c)
341
331
321
311
301
291
281
271
261
251
241
231
221

TRADING A DECADE

It would dramatically improve anyone's trading if you could know in advance that a particular year would be a bull year or a bear year, the end of a campaign, or a reversal in trend. It would be great to know within the 12 month period which months had the best possiblity to produce the end of a movement, or the start of a fast movement. With this knowledge, you could buy with confidence on sell offs and short rallies, or stay with positions and not be frightened out by short term moves which were contrary to the trend.

One of the discoveries Gann made was to be able to qualify whether there would be a bull or bear year the following year. Part of that forecasting ability came from long term charts, and the application of the cycles of years.

In making a forecast for the rest of a decade, you should check back, 10, 20, 30 years, and see if the markets had experienced similar price movements. You, also, would look at 50 and 60 years for similarity, and look at the 5 and 10 year cycles from tops and bottoms. You should circle the 60 and 120 month counts on your charts, as these can be considered to be reasonably precise timing points to look for change. You can, also, take a ruler or legal sized paper and mark the distance of 60 and 120 months, so that you can view these cycles from all tops and bottoms on the charts.

W.D.Gann laid out a decade long plan which he used for forecasting and basing trading plans. In that plan he said, and I will paraphrased here, that the first year of a decade, year one, is the year to look for a bear campaign to end and a bull market to begin. The second year, is a year of a minor bull market or a bear market rally. Year three is the start of a bear year, but the rally from the second year may run into March or April, or if the second year is a decline, the decline from the second year may run down and make bottom in February or March of the third year. Year four is to be a bear year, but it ends the bear cycles, and lays the foundation for a bull year. Year five is the bull year, the year of ascension. Year six is a bull year in which the bull campaign which started in the fourth year usually ends in the fall. Year seven is a bear year (but note that 1927 was at the end of a 60 year cycle and that there was no decline). Year eight is a bull year. Prices start advancing in the seventh year and reach the 90th month of the decade in the eight year. This is very positive and a good advance usually takes place in this year. The ninth year of the decade is the strongest of all bull years for bull markets. The final bull campaign culminates in this year after an extreme advance, and prices start to decline. The bear market usually starts in September to November. Year ten is a bear year. A rally often runs until March or April, then a severe decline takes place until November or December, when a new cycle begins and another rally starts.

This was what Gann used as a basic road map in his forecasts. The 10 year cycle repeats over and over. It is a little easier to see when looking at individual stocks, primarily due to the time period a broad market takes for consolidation, which consists of a number of stocks rotating up to top and then starting to trend down.

THE ROAD MAP APPLIED

The purpose of this exercise is to look at the five and ten year cycles, and to see the value of this road map, as it relates to individual years. Since 1910, there have been 76 years to view, and 49 were excellent forecasts, 17 were failures, and 10 were questionable depending upon how strict an interpretation was applied. The fifth and eighth years have been exceptional. This road map of forecasts is dramatically improved when viewed in the context of the five and ten year cycles, as well as, looking for similarities in the movements from 10, 20, 30 years back. You may notice that if one year failed to follow the forecast, that there was a high probability of the next year doing the same, and that the third year moved back on track with the road map.

Let's start with the year 1911. To get a proper perspective of this year, the first in the decade, we look back one year, and eleven years to see if the road map we are following held true during those years. Price in the year 1900 found bottom in September, and ten years from that date is September of 1910. So, as we entered the year 1911, we have the start of a new 10 year cycle in 1911, and a bullish year. Ten years back from 1911, we see that 1901 was a year of a fast move up in the first six months, and then a reversal. So looking at 10 years, we have a July top in 1901, and 20 years back, a bottom in July. Twenty years would place the turning point in the July or August time frame 1911.

Since we expect a bull year in 1911, we could look to buy two or three month corrections because that is the normal movement against a trend. During January, 1911, we have a five year cycle coming in from January of 1906, and running from the 1910 bottom, we would count out calendar day counts and watch for change on 30, 45, 60, 90, 120, 180 (six months), 270, 315, 330, and the important anniversary date.

As price moves into 1911, we see that a bottom was found in the 59th month (from the five year cycle), but this was not a clear setup. You would start another daily count from the December, 1910 bottom, or on the monthly charts, note that June, 1911 is a possible turning point, because it is 6 months from the December low. Twelve months from the 1910 bottom points to July, 1911. This is also 180 months, or 15 years from 1896. As price moved into July, 1911, there is an obvious loss of momentum since 1910. Three months up from December, 1910, a 90 calendar day count, has brought a correction, and now in July, the momentum of the expected move up is in doubt. Again, these are 10 and 20 year cycles coming in this month, and because of the evidence you would either be relinquishing long positions, or using very tight protective stops. You could look to establish short positions on the 180 day count, or six months from the December, 1910 bottom, or again on the 12 month cycle from the July, 1910 bottom, with the expectation of a 90 calendar day corrective move, maximum, or a minimum correction of three weeks.

August presents a fast move down, and price closed on the low of the month which is an indication that the move will continue in September. In September, support is shown at the old 1910 bottom and you ask yourself at this time what the chart would look like if price was to move up from here, on a 270 calendar day count from the December, 1910 low, and 90 days from the June high. You could assume that if price moved up from September, a double bottom would be formed after a full three month move down. If you had taken short positions, you would be running tight stops, or looking to take them out if price confirmed the possible double bottom. Since the broad road map indicated that the year is to be a bull year, you might be looking to establish long positions again.

Year two on our road map says look for minor bull market or a bear market rally. Look back ten years, we see consolidation, a nonconfirmation of that base road map, and 20 years back, shows a rally ending in April. The significant high from ten years back was also April, so we know to look at this month. We have a six month count in March and 12 month count ending in September, as well as, a five year cycle from the 1907 low in November. Looking back fifty years gives us a bull move, and sixty years back was also a bull move, with both of the bull moves ending at the end of the year. The conclusion from this is that in 1912 we have no clear trend established from past history, but, let's leave the road map in effect and use it cautiously.

Assuming that price has bottomed in September of 1911, and looking forward to a possible bull year, or a bear market rally, you would not be short, and you may be long. The three month move up from September shows a loss of momentum in December, 1911, and you would be moving to a consolidation trading strategy if you chose to trade at all. At a minimum, you would be tightening your protective stops on long positions.

In January of 1912, price gives an inside month, closing on the low. From the road map, we assume that the trend is up, although you are using it cautiously because of the nonconfirmation of previous decades. February shows support without breaking the January lows- added confidence. You are looking for a change at six months from the September low, and when it comes in March, price gives a strong move up, exceeding the previous year's high. April is the month, or the ten year and twenty year cycles, and this ends the strong up move. Because of the cycles coming in April, you would again be tightening stops in long positions, and possibly looking to go short, although this is not indicated from the road map and as you know, top takes time to form, so if this is to be a top in the market, it will take time for distribution to occur. The loss of momentum is apparent, and again, a consolidation trading strategy could be used.

Anniversary dates from the previous year's high in June, and two years ago (the low in July) are present. Support is being shown at the level of the old high, and price consolidates with an upward tilt into the anniversary of the previous year's low in September. Price moves up and closes on the high this month, and it appears to be accelerating to the upside with higher lows for the last two months and a breakout above the old high.

Seeing this price action might make you exceptionally bullish, but the road map for the next year, year three of the decade calls for a bear year to start, and as this is an anniversary month, you would be cautious. If you were long, you would be using tight stops, and you might be looking for short positions. In October, price reverses down, and you are out of any long positions.

The road map works well in the decade of the teens, and it is one of the decades upon which Gann originated this plan. As I pointed out earlier, not all decades will exactly follow this plan. That is the reason that it should be used in a road map fashion. It is to be applied with an eye on the recent past, and the 5, 7, 10, 20, and 60 year cycles. It is a broad road map for the market in general, and as with all road maps, there may be a few "detours." I urge you to use the method above to examine the Dow Averages further and use the same road map for individual stocks. Doing this will help you see the value of an overall long term trading plan, and it will help you to understand how markets move through time.

A makeup of a trading plan for any year should be loosely defined within the parameters of the road map. You may find that in certain years, price has a different destination than that which the map indicated, however, the probabilities are there for the road map to be correct.

APPLYING THE CONCEPTS

Now that we have viewed the tools and the concepts, its time to put them together by studying past history. You have seen the effects of these in abstract, but together they act as filters against each other, and as emphasis to each other.

This chapter will require the most work on your part. I do not believe that you can properly trade with these methods without a considerable amount of work , and I do not expect that you will understand it well without that work. In this chapter you may discover ideas which are not mentioned earlier. You may understand concepts which were previously unclear to you. And if you find that you are willing to take the study of this chapter, and the charts especially, a step further, you may become as enthralled with these methods as I am.

In studying these charts, you must again remember that there are two types of resistance to a trend; price resistance and time resistance. Horizontal resistance, which is commonly referred to as price resistance can be shown by drawing horizontal lines across the chart at that price level. Time resistance, can be shown by drawing vertical lines down from the top of the chart, as is done with the divisions of a square in some examples. Also, there is price resistance or support given by the angles. The objective is to locate on the charts the zones of extreme price and time support or resistance, and as price and time move into those zones, we look for the tradable setup.

One of the major advantages to this type of approach is you can be prepared for the trade well in advance of the actual execution of it, rather than finding yourself reacting to the market or price movement emotionally. Being prepared or being able to anticipate a change in price trend is a great advantage, especially when considering the emotional capital expended in constantly reacting to the markets rather than anticipating and being prepared in advance to act. We can be our greatest enemies. If you can acquire the discipline to trade or put on positions only when time is right, according to the charts and setups, rather than attempting to buy and sell every movement, you will find this trading or investing profession quite profitable and enjoyable.

The system Gann recommended for finding trading opportunities was to first establish a time turning point (cycle), then confirm that probability on all series of charts, (monthly, weekly, daily) in very active markets hourly.

SQUARE OF NINE

The square of nine, or spiral chart of nine, is a very valuable tool for trading and forecasting. The accuracy of this tool will, at times, leave you wondering why you would ever need any other knowledge to trade successfully. Just keep in mind that hindsight makes for very easy trading. You must still have a basic understanding of price movement. Remember, this is the foundation of analysis and all else is built upon this knowledge. As you go through the examples in this chapter or any chapter you **MUST** cover up the future price action with a piece of paper and move it so as to view the charts, day by day, as if the exercises were in real time movement.

First, align the disk so zero is on the date of December 21st. The first thin red line moving to your right is 45 degrees from zero. In time that is 45 degrees of one year or approximately 45 calendar days. The date is February 4th. You will, also, notice a dark blue zone, this is a death zone which I will discuss further in this chapter. Moving out to the next angle is a red line which is 90 degrees, or one quarter of one year, or approximately 90 calendar days (on March 21st). Determining degrees of movement in price are found in the same manner. With zero still at December 21st, follow the dark red line up to the number 116. Moving to your right 45 degrees is 111, and 90 degrees is 106. Moving up in numbers, or to your left, 45 degrees up is 121 and 90 degrees up is 127-128. One hundred and thirty-five degrees up is 133 and 180 degrees up from 116 is 139. This could, also, be found mathematically. Find the square root of 116 or 10.77033 then add 1 and square that total which equals 139. To calculate 360 degrees, find the square root of 116, then add 2 and square it. This is 163, or 360 degrees, and on complete cycle in price.

Now look at the angle running from the center of the square down to November 7th. Notice the numbers running along that angle are all odd squares of numbers, 9-25-49 etc. Moving in the opposite direction from center to the date of May 6th are the squares of even numbers. The angle 90 degrees away, or August 8th to February 4th, indicates 50 percent between those natural squares of numbers.

TIME CYCLES

The major cycle is one year and it's multiple outward and it's geometric divisions inward. At important changes in trend the inward cycles of one year will terminate the multi-year cycles. For instance, a 90 calendar day cycle can term a 5 year cycle or a 10 year cycle. The cycles of the geometric divisions of one year inward should first be assumed to be cycles that will bring about change in direction. Another way of viewing these cycles is, as resistance in time to the trend in force.

These cycles present strong probabilities as high or lows when combined with analysis of the pattern of movement and price resistance levels. This probability can present an excellent trading opportunity.

The **45** day cycle can reverse a trend. It is a cycle that ends "blow offs" or very fast movements. Moving low to higher low in 45 days can, also, set up a 45 day movement straight up which would then be 45 days from low and 90 days from low. This would then be a high probability for a market to reverse trend. The same is true with down trending markets. Forty-five days high to lower high can result in a 45 day acceleration downward or "blow off" of a 45 and 90 day cycles from high to low. Gann referred to the 45 to 49 day cycle as a death zone due to the many "blow off" movements terminating on that cycle.

The **90** day cycle is the most powerful division of the one year cycle and has a very high probability of support or resistance. Ninety days straight up or down will usually start a countertrend movement or reverse the trend. Ninety days from all significant highs or lows must be watched for a change in trend. Again analysis of support and resistance in price and knowledge of price movement will enhance the probabilities from this cycle. Against extreme pitch or momentum, this terminal cycle can run 99 days. This seldom occurs in stocks or indices, but is a probability in commodities. Price then becomes a confirming and important aspect of the analysis.

The **120** day cycle is one that usually occurs with the trend. As in an upward trending market, this should be watched as a low to a countertrend movement. This is especially true if a high was found on a 90 day cycle. But you must study the historic movement of the market being analyzed. Some stocks and commodities do have 120 and 240 day low to high cycles. These same items will vibrate from 30, 60, 120, 150, and so on.

The **135** day cycle can be the last high or, more typically, a lower high which ends a topping pattern. If a high was found at 90 days, then 135 would also be 45 from high, and visa-versa in a down trending market. It is a cycle always to be watched for change in trend, as well as, price resistance and how the market is moving will qualify the probabilities. Fast moves can start from this cycle expiration. This cycle can run low to low but other cycles need to be coming out at the time, plus or minus a day.

The **144** day cycle can terminate movements and is generally misapplied by students of Gann. The square of 144 overlay was designed to be used primarily with monthly charts and occasionally weekly charts. It's use as a daily cycle sometimes has validity, and should be monitored for aspecting or squaring, with important price divisions of 144 as 36, 72 or 108. If 144 is a valid vibration, a 9 day cycle will be obvious- as in vibrations from 9, 18, 27 and 36. This cycle as a dominant, daily cycle is much more prevalent in currencies and commodities. I have seldom seen it in stocks.

After 90 days, the **180** day cycle is the next most powerful cycle and is fifty percent of one year. It can be viewed the same as a 90 day cycle. Its importance is enhanced with other cycles coming out at the same time. After it's expiration, this cycle can produce movements of a full 90 day up or down. Moving from the highest high to a new low, or vice-versa, has a higher probability of changing the trend. Either way it is a powerful cycle for change.

The **216** day cycle is one and one half the 144 day cycle and just like 144, should be monitored for aspecting.

The **225** day cycle creates possibilities which are similar to the 135 day cycle, and can be the next vibration point if 180 produces a significant high or low.

The **240** day cycle like the 120 day cycle tends to be a low if the market is trending upward. Both 120 and 240 are considered positive cycle or "run" with the trend.

The **270** day cycle is the next important (after 180), as it could start a 90 day cycle which would end a one-year cycle. In other words you should be counting backwards from important dates in the future. Since it is a very high probability that a 45 or 90 day cycle will end an important one-year cycle, looking backward 90 and 45 days will give the high or low prior to the "blow-off" of the larger cycle.

The **315** day cycle is 45 days less than the one-year cycle and can start a fast "blow-off" movement of the one-year cycle and should always be watched for a change in trend and a start of fast movement.

The **one-year** cycle can terminate trends. It will usually mark important turning points during strong up trending markets. Price will tend to go low-to-low and high-to-low. When the vibrations start to move low-to-high, the trend is usually changing to down. In down trends the cycles will run high-to-high or low-to-high. But when the vibrations start to produce low-to-low or high-to-low the trend may be changing. Again, a basic understanding of price movement, as well as, support and resistance levels are critical.

Notice, on the price/time calculator are "fixed" dates starting with March 21st. This is the first day of Spring and for many cultures is the start of the new year. This year is then broken into equal divisions of 15 days or degrees. The results are the natural turning points within a year which could be viewed as a natural seasonal time to look for change. These dates are helpful and serve to reinforce or act as an "exclamation point" to the cycles that are produced from the movement of the market itself. The first two divisions of 15 and 30 days should always be watched when the market is moving in a sideways manner, as they will usually produce change in direction.

ASPECTING PRICE AND TIME

Price is aspecting time when price is at an angle from the current date. For instance, with zero, again, placed on December 21st, the price of 116 is conjunct or on the same side of the square as time. At the price of 139 it is in opposition to December 21st (opposite side of the square). Very important highs and lows occur when price and time are in conjunction or opposition. Put zero on December 4th, notice 221 is conjunction. Now look at December 4th on the S&P daily chart. Put zero on August 25th and you will find 338 is in opposition. Now look on the S&P daily chart at the high on August 25th, 1987. Price and time can, also, aspected at the other angles of 45 degrees and 90 degrees.

ANALYZING PRICE MOVEMENT

Throughout this chapter, I will be analyzing the price movement on the charts, along with applying the square of nine analysis. The purpose of this analysis is to be able to, at all times, anticipate what the market might do. If you are not prepared, then you will likely react to price movement emotionally. This can cause traders to sell at lows and buy at highs. I will always attempt to determine if the situations is trending, consolidating, or in a counter trend movement. I know what the extent of that counter trend movement could be in both price and time, and always looking for the start or end of "blow-off" (fast movements).

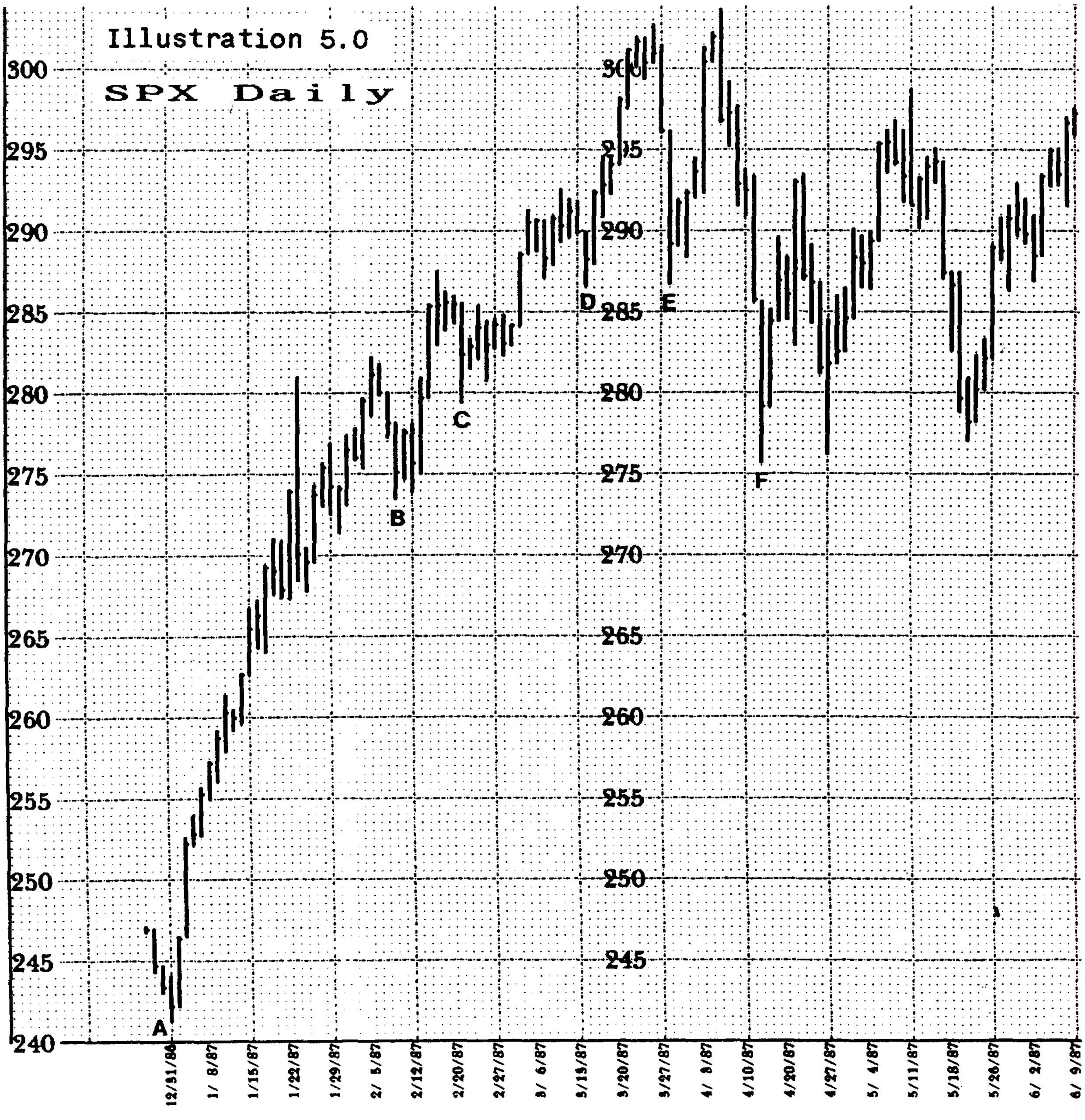
As a trader (especially if you trade options) the ideal time to buy or sell is at the very beginning of fast moves. I will be concentrating on qualifying those trade situations.

In order to analyze price movement, you must look at all time series of charts daily for the short term trend, weekly for the intermediate trend, and monthly for the long term trend. Also, view intraday, preferably 1/2 hour charts, for the very short term trend and to facilitate your entry.

We are going to make some observations regarding strong trending situations. Within a strong up trend, the lows of countertrend moves bottom above the previous highs of the last reaction point. Usually after three of four drives on a daily chart, price will consolidate on the weekly charts. Weekly chart price action resembles daily when trending. After the daily charts consolidate three or four times, which will seldom be noticeable on weekly charts, then the weekly charts will consolidate. So we qualify the trend as very strong, if the countertrend move bottoms above the previous high. This is very helpful knowledge, as you will see. The time for these quick countertrend moves will be on an average of three to four days with the major indices and three to five days with stocks. Also, with stocks and indices, the countertrend movement will usually come very close to matching in price, the previous movement.

A countertrend movement that falls within the three to four day period is assumed to keep a strong trend intact. A shorter correction indicates a stronger than normal trend and possibly a "blow-off". A movement exceeding the fourth day indicates the trend may go into a consolidation or reversal. This concept of normal movement against a powerful trend can be applied to weekly and monthly charts by using three to four weeks and three to four months as the normal life span of intermediate and long term corrections. We will view them later.

Look at the Standard and Poor's 500 (Illustration 5.0).



Point (A) is the start of a very powerful trend on December 31, 1986. The first reaction against that trend occurs at Point (B), showing support on the third down day, thus indicating the strong trend is still intact. Point (C) is a one day correction, indicating the strong trend is still very much intact. Point (D) is a countertrend move of only one or two days. Therefore, the trend is still intact and giving higher highs and higher lows.

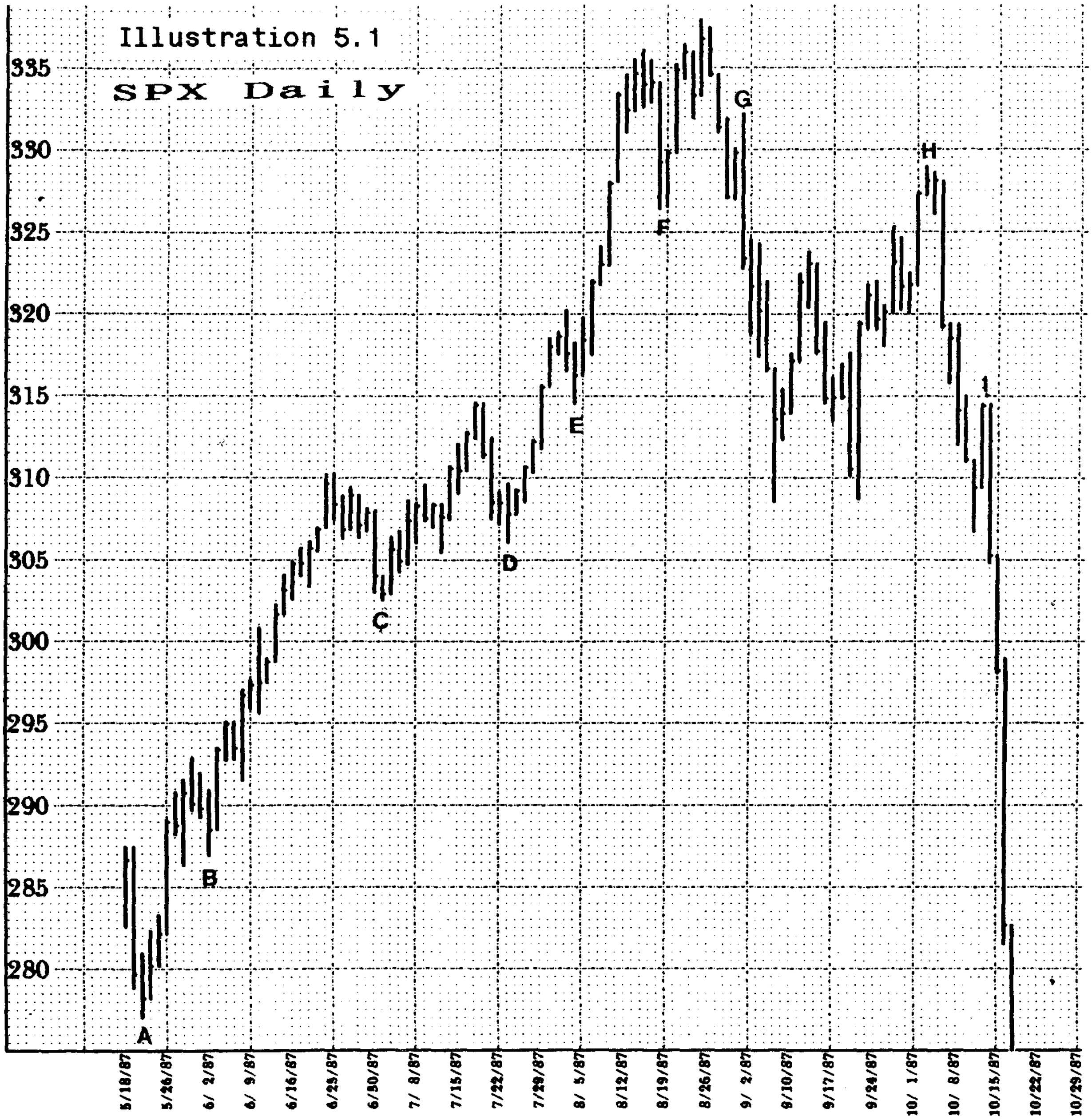
At Point (E), the price corrects for two days, but exceeds any previous correction in number of points- a warning of what Gann would term an "overbalance of price." The trend is still intact as a double bottom forms at Points (D) and (E). Price then consolidates for two days and runs up for four days. On the fourth day, price forms an outside reversal day down (a higher high, lower low and close on low). This pattern is a very bearish sign when forming twin peaks, especially at cycle expiration.

The market then breaks for six days to Point (F), indicating the original powerful trend is over and a new downtrend or sideways movements (consolidation) is starting. Of course, if the trend is in a powerful move down, you would look for upward corrective (countertrend) moves lasting one to four days, followed by a breaking of the low that was established at Point (F).

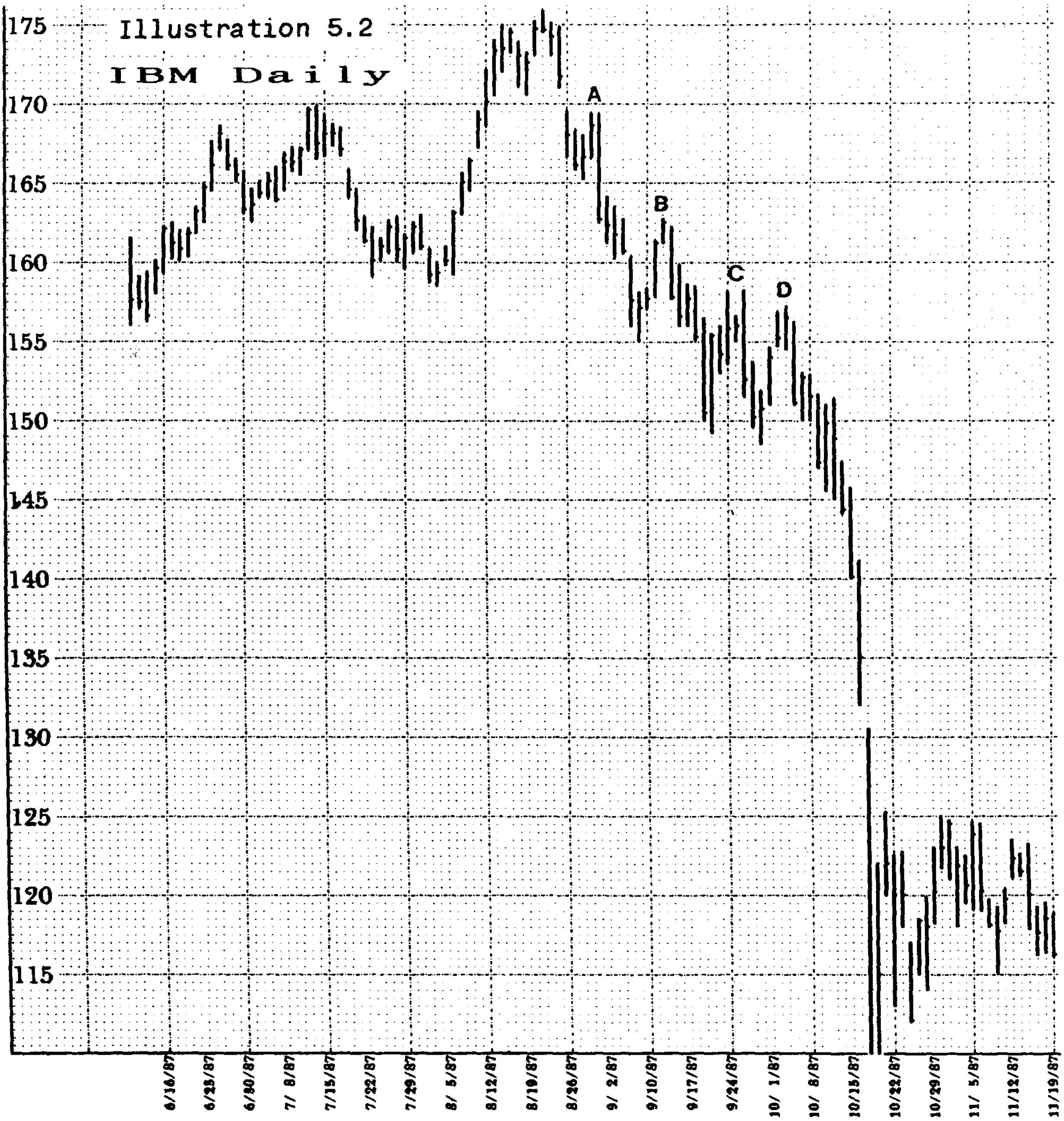
Now, look at the S&P 500 (Illustration 5.1). Point (A) is the May 20, 1987 low and the start of a powerful up trend. Point (B) is a two or three day correction, keeping the powerful trend intact. There is a two day correction at Point (C) and Point (D) which finds support on the fourth day down. Both keep the trend intact as at Points (C) and (D), which finds support on the fourth day down. Both keep the trend intact as at Points (E) and (F). At Point (G), the swing low is broken and the correction exceeds the fourth day, indicating the up trend is now over and a consolidation is starting. Notice, after the high at Point (H), price moved down to the old lows then could only rally one day at Point (I), indicating the possible start of a fast move down. That was October 14, 1987.

In Illustration 5.2, IBM stock is moving down from it's September, 1987 highs. The first reaction moves up only one day at Point (A), indicating the possibility of a powerful trend in force. The next movements are up in three day sections at Points (B), (C) and (D), all indicate trend continuation. These are followed by a massive break with no reaction exceeding four days up. This keeps the trend intact.

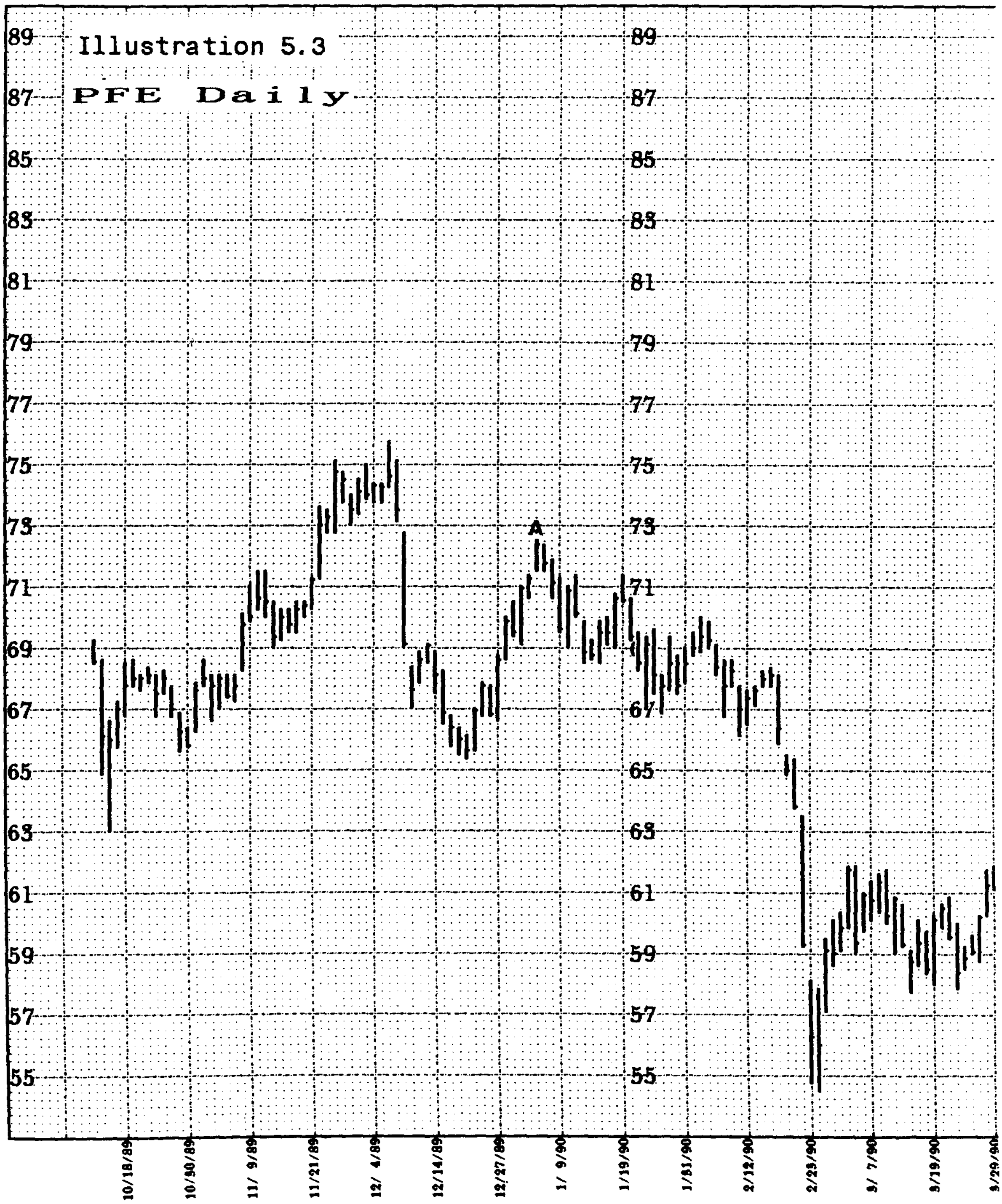
Obviously, you could develop trading strategies from this road map of powerful trends on daily charts, but don't bet everything on this concept. A stock or commodity can correct more than four days and then continue the trend. (Illustration 5.3) This next correction (countertrend) in time will likely be seven to 10 days Point (A). Notice how the three lower high setup developed after Point (A). I was watching this stock then, but did not understand the pattern until February, 6th. This gave me plenty of time to play a twelve-point move down.



In the instance of a new high or new low following a larger correction than had appeared earlier, will likely produce a momentum divergence. If you study a large number of charts, using the three to four day guideline for correction against the trend (countertrend) movements, it's value and applicability will become clear. You will expect reactions against a trend and will be able to better judge trend strength by the nature of the reactions you see. You may, also, be able to find places to add to positions within a trend.



If you will study pages 257, and 258, in the appendix and reread this section, it will be very helpful toward increasing you knowledge.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S&P 500 CASH

The charts (in the supplemental materials) which we are going to use for these exercises are reproductions of the charts I personally use to trade. You will see how I have found it easy to monitor, on the charts, all of the technical data with notes I have made. I believe this would be much more useful than reproducing a cleaner or prettier chart.

Look at the high that occurred on July 17, 1985, at a price of 196. The 1982 low (weekly chart) was 101, so 196 is two full cycles up in price (720 degrees). The two previous drives up had highs of 170 (180 degrees) and 184 (90 degrees). This is more than enough to indicate significant resistance. The price of 196 is, also, on a natural resistance angle on the spiral chart and the "square" of 14. The start of the drive up on the weekly chart was the price of 147. Notice that was 180 degrees down from the previous high of 173. From 147 to 196 is 49 points. If 147 were put into the middle of the spiral chart, price would have moved three cycles to 49, also another natural "square" of number 7. The next low that occurred on the week of October 12th was 160, thus making 196 three cycles up from that low or 36 points. Using the technique of placing a high or low in the middle of the spiral chart and moving outward, can be an effective tool. Personally, I believe that, most of the time, this technique borders on overkill. It is easier to simply be aware that corrections can be squares of numbers. On the weekly chart you can see price is in the third drive up, so the wave movement could, also, be completing a larger five wave movement. The very last high was 190, or 45 degrees away from 196, and a drop below that would be significant sign of weakness. If 196 was an important high and price was going to correct, what would be the objective in price, how could we position to trade a possible correction of the trend?

First, we should mark the 50 percent of ranges on the chart. These are 186, 178, 172 and 148. You should notice that these 50 percent marks are exactly or within a point of previous highs or lows. Therefore, 50 percent marks are vibration points or centers of gravity. In other words, important highs or lows may be centers of gravity and, therefore, become 50 percent marks into the future. We know the fifty percent marks are very important support and, in a very strong trend, price will also tend to bottom a point or two above that support. Support could also be found where it had previously been shown at 185.

Using the spiral chart, 45 degrees down is 189-190, 90 degrees down is 182, and 135 degrees is 176. Putting 0 degrees at the 147 low, notice that the lows were harmonic to the 147 low, just as 196 was a harmonic to the highs. So, if the vibration is still intact, we may find low on a harmonic to 147 or 185-186, 177-178 or 172-173. If we put 196 into the middle of the spiral chart then 184 and 181 are support. Looking at previous moves down, the bear market of 1984 was 26 S&P points in length, and, thus, equal to a 170 objective. The largest previous move down in this trend was only 9 points which produces support at 187. The largest single move down was 17 points or 179, so the support levels, which will become resistance levels if broken, are 189 to 190, 185 to 186, possibly 182, and definitely 178 to 181 and 170 to 173. Now look at the daily chart. The first movement finds support at an old low on July 24, 1985. But the rally is only one day up then down sharply, breaking a previous low (a rally day is qualified as higher high and higher low, a down day is lower low and lower high). Price now shows high, then low, then lower high, on July 26, 1985, then lower low. This trend looks down and possibly into the 30 or 45 day cycles. Then price rallies two days followed by an inside day on August 2nd for possibly a second lower high. So breaking the low of the day on August 2nd, would be an ideal place to position short.

I am going to digress from this exercise to make a very important point about trading. Your purpose in trading is not to pick exact highs and lows. Your only purpose is to make money. You should find high probability setups on a chart which will allow for a tight protective stop and the start of a fast movement. You must identify when the market is trending and trade with that trend or when the market is consolidating and trade it as a consolidation. Those who attempt to trade by only picking the exact top and bottoms to trend, seldom last very long in this business. Top and bottom pickers invariably go broke. The majority of the time, you should look for a sign of weakness to sell short. That sign of weakness could be something as simple as breaking the previous day's low, or a sign of strength to go long, as breaking the previous day's high. Every position is not going to be a home run (the top and bottom pickers mentality), so take your profits at reasonable objectives. Don't get greedy. When making your trading plan for a position you would be wise to consider the partial position strategy mentioned earlier in this text. When you don't understand what the market is doing, don't trade by guessing. Trade your analysis, not the market movements. Quite simply if one had the patience to position only when cycles expired, using previous days highs or lows as entry points and protective stops, you would consistently make money trading.

Let's move back to the exercise. After breaking the low on August 2nd, price moves down for three days, up one day, then down into the 30 day cycle with little down side momentum and is resting on a predetermined support level. On the weekly chart, from the low in the first week in May 1985, price is, also, on a 2X1 angle. So, exiting short positions and going long would be a good strategy, with a protective stop slightly below the low of the previous day. Remember that there is nothing but lower lows and lower highs on the chart, so we may be positioning against a trend. The 45 day cycle will be the next clue. Stopped out on August 22, 1985, we're left with a small profit or break even. Price then moves up into the 45 day cycle with a three day rally not exceeding, in points, the previous rallies. It is at the predetermined resistance level. This could set up a 30 or 45 day fast move down as it is, also, a 4th lower high. On August 30th, a daily low is broken and we are now short. But with the possibility of a significant move down, let's keep our protective stop a little above (i.e. one point) the high of August 29, 1985.

Look at the weekly chart. At this time price is below the 45 degree angle from high, below the 45 degree angle from low, and the 2X1 angle (which you will need to draw on the chart) comes in at 189 that week. Support finally is withdrawn the week of September 13, 1985. On the 60 day cycle, price reaches the upper level of our next support of 178 to 181. On September 19th, primarily due to the 60 day cycle, I closed out my short position when price took out the previous days high. I did not play the long side because of the very weak position. I sold short, again, on the third day up, this time not waiting to break a low since price was at angular resistance and appeared to be trending. Price then moved down to September 26th and moved up from the support of 179 in an impressive manner. I remember at that point being sure the index was going to run out a full 90 day cycle from high-to-low and was very bearish. The next day saw a higher high and higher low. On October 1st, I closed out my shorts when price moved above the previous day's high. I went short, again, on October 3rd, but now for the first time price had moved above a swing high and exceeded in points any other previous rally. The low on the 26th was a momentum divergence and the high on October 2nd it reached up to the low of the previous consolidation. But I was still bearish, and assuming a drop down to 170 to 173, by October 17th. On the 9th, price moved above a previous daily high and above a 45 degree angle on daily chart, showing support at a previous low of 181 on the 30 day cycle. In addition, this week contained, both, a one and two-year cycle. On October 8th, the advance-decline line was at a higher low. To much risk now to be short, I brought my stop down to a break even trade and waited for the resolution of the 90 day cycle. By October 17th (90 day cycle), price had moved above the 45 degree angle from high on the weekly charts. Therefore, we are moving out from weak position from high, leaving what could be a five week basing pattern behind. Price had moved back above the previous lows at 186 making it very doubtful that the trend was down. I remember, even in the face of the mounting bullish evidence, still being psychologically bearish. On October 24th, price moves above the 50 percent mark, but still below previous highs and at a predetermined resistance level. Then on October 29th, it gave me a strong move up after only two days down, moving above all resistance. I remember saying to myself at the time, "Why are you afraid of the market?" There's a low at a predetermined support on September 26th -a higher high- higher low on October 17th, higher low on the 21st with only one day correction- a higher high- a two day correction with higher double bottom on October 28th. This is not a market that is trending down! It's a third higher bottom! Buy It! Price could be in a 90 day cycle from low on September 26 to September 29th, or from October 8th. Either way both those lows must be considered since the Dow's lowest low was October 8th.

You should continue with this exercise by covering up with a piece of paper these charts and moving day to day and week to week using the same fundamental understanding of price movement. You should pay close attention to the cycles, not attempting to pick tops or bottoms but look for a setup to position. Don't attempt to be positioned 100 percent of the time, but just try to find points where you can jump on the trend and make a profit with limited risk. Keep an account of your profits and losses. You will have loses but they should be very small per position. Before reading further, please complete this exercise at least through April, 1987.

Now, let's look at some of the trades I actually put on during this time period, and see if you could see the same opportunity developing. Look at March 21st (first day of spring). There was a low on September 26th. But the 26th was followed by a weekend so that cycle could be running from 27th, 28th or 29th. On April 7th or 8th, was a 90 day cycle from high with a 180 from low. However, a full 90 day cycle from where this drive started, was not until April 23rd or 24th. So, a correction starting anytime after March 26th for a low on April 7th or 8th was a good possibility. First, price objective would be one point less than the previous larger correction or 11 points (11 1/4 is natural vibration). So I was short 238 on April 1st and covered at 229 for a fast nine point profit. I went long on April 8th at 229, then out of longs, at the break of 242, on April 18th, for a profit or 12 plus points. I went short at 241 and change, with my protective stop at 246. This is an unusually large protective stop, but a 90 day cycle meant a very good probability for a 30 day move down, especially since high day saw a loss of upward momentum. On April 23rd, I added to the position at 244 with a 245 protective stop (90 degree aspect was 244) and added, on April 29th, with a break of the previous days low. Obviously, I went short on July 3rd and covering on July 8th at 13 to 14 points down and selling short, again, on the break of 239 and covering on one year on July 17th at 237.

The time period from December 29, 1986 through January 5, 1987, should have been obvious that something big was going to start. Note, the large number of cycles on the daily chart and the higher highs, higher lows on the weekly chart in addition to the 45 degree angle on the weekly chart.

Going into the end of March, 1987, there was a 90 and 180 day cycle expiring. From the previous important high of 254, 270 degrees was pointing to a price of 303 (also 3 times the 1982 low). I went short on breaking the low of March 26, 1987, and closed out at 14 points down which matched the previous largest correction. The market went 2 points lower. It spent two days on the side, then gave 3 days up followed by an outside reversal day down. It Finally hit the 303 objective from September, 1986 high, the 179 low (two cycles out in 18 months or 540 degrees in time) and price was, also, at a 135 degree aspect from time. I went short that day and covered at 26 points down which matched the previous largest movement down. The August, 1987, high was, again, obvious, especially with five year and seven year cycles expiring. When price dropped below the 45 degree angle from the August highs on October 15th, after having been above it for sometime, it put price in a very weak position and a waterfall move down was probable. Notice on the weekly chart, the week of November 18, 1988, when price broke 274, it moved into a very weak position from the August high and gave a fast move down. I was short going into that point, added to my position and covered the shorts at 21 points down, again, matching previous corrections.

Let's stay with the weekly chart. Notice the movement into the November, 1988 low. All higher highs, higher lows and corrections from highs were almost equal in number of points. Then in March something very important happened. Price exceeded any previous move up in points. If the low at the end of March was, in fact, a low for the next drive up, the correction would be significantly less in points and would for the first time bottom above a previous high. This would indicate the start of a "blow off" to the upside, moving at least 360 degrees from the 283 October high or to 354. This is an unusual pattern on a weekly chart, however, occurs often on a daily chart and usually starts a 90 day "blow off" cycle from the last low. Remember "blow offs" are tremendous opportunities since the last few countertrend moves are only one to three days followed by large thrusts. Notice the lower high in October, 1987 was 540 degrees in price and time from the April 7, 1987 low, and of course two years or 720 degrees in time from the 1986 low. Notice, on the weekly chart how highs in 1987 are first 270 degrees high to high, then 180 degrees high to high, showing a loss of momentum. Now look at how this latest "blow off" has been 135 degrees low to low and also how highs have been running high to high on the square of nine.

Before reading further, you should finish this exercise by going through the remainder of the S&P charts, again, covering up the future price action with a piece of paper, working with daily, weekly and monthly charts. I cannot emphasize enough, how important this exercise is to understanding how markets move. This exercise is the same as a baseball player taking batting practice or a professional golfer going to a driving range. You as a trader must practice your skills just as a professional ball player practices his skills. Every weekend I take a set of charts and go through a similar exercise. If you are going to have a high batting average and hit home runs in this game of trading, you need to practice. Now let's look at some stock charts.

McDonald's Daily Chart

Look at the daily chart of McDonald's Corp. You will find it in the materials which came with your book. Again, we see a 90 day

cycle low to high, this one-one hundred and eighty degrees from 60 7\8 which equals 77. Price hits a high of 76 3\4. How could you position against this movement? If shorting the stock, you would put part of your position on a 76 1/2 or better, with a protective stop above the digit 78 or 78 1/8. Then short the remainder upon breaking the low of 74 7\8 (the
first sign of weakness). In this instance, that might have been a little difficult since there may have been few up ticks. If positioning put options, they would be purchased simply upon breaking the 74 7/8 low. I would recommend buying in the money so a protective stop, which could then be lowered to just above 77, would not be too large a loss to capital in the event the trend was not down. Notice on the spiral chart, 72-73 is 45 degrees from the high. In an up trend, the first 45 degree price level can produce a higher low, or, in the case of a down trend, a lower high as with McDonald's.

So, now that we are short, what are our objectives in both price and time? First we want to watch 45 degrees down from the high, or at 72-73, and at fifty percent of the range or 72 1/4. Both are near the same level. The next place to expect support is at 90 degrees down or at 68-69, which could hold the up trend, then the old low of 60 7/8 which is 180 degrees down. But time is the most important factor, so we will look at the closest objective in price as the time cycles expire. The low was April 7th, 1986, but the 7th was a Monday, so Saturday the 5th or Sunday the 6th could, also, be the start of this cycle. The 120 day cycle from low could be the 5th through the 8th, and since the low was aspected by 90 degrees from price and the high was in opposition price to time, we can assume the other angles to be very strong in both time and price. When high is found on a 90 day cycle there is a probability to find low on the 120 day cycle (30 days down from the high) or square to trine. So let's follow the price movement now. There is a high on July 3rd, then a down day on the 7th, the 8th day-lower, and price goes through 45 degrees or 72 which was, also, through the previous high at 72. Then, it took three days to consolidate the large down movement and a further day down to 62 3/4, followed by an inside day on the 15th. Next, it breaks the 50 percent mark and, then, recovers it. July 17 is the first rally day (higher high and higher low).

We know that a countertrend movement could be three to five days. However, it's more likely a maximum of three days since price is in a very weak position, i.e. below the fast angle from high and has broken below the previous highs. So we have resistance in time for another day or two of rally, resistance at 50 percent of the range or 72 1/4, obviously the angle, 45 degrees down from 76 3/4 or 72 (not to go into the digit or 73). Since the high came in so precisely, let's keep our protective stop at break even and assume that the trend is down. The next day is an inside day. The following day, July 18th, puts some fear in our minds since price moves above two of our resistance levels, even though it stays below 73. Price fails to hold above resistance by the close. That was the third day up. Price, then, broke the fast angle and dropped back below it (a possible sell indication). So, let's move our protective stop down to slightly above 73 or 73 1/8 and add to our short position upon breaking the low of 69, which would, also, be breaking the 45 degree angle from low, on July 14th. That break could bring in a much larger drop since price is in a very weak position from high (below the fast angle or 1X2). Then, if price broke the fifty percent mark at 68 3/4, it would be in an extremely weak position. The next day, July 21st, price gives small range but the high comes in exactly on the angle. Next day, the high is, again, on the angle and breaks support. Therefore, we add to our position. The next day is down again, followed by a small range inside day. Then there is a one day rally on July 25th, and down again on July 28th. Since all price could manage was a one day rally, we must conclude that the trend is down hard. Let's bring our protective stop down to a little above the last swing high or 67 1/8.

As pointed out earlier, the cycles to bring in change, due to the low and high coming on Mondays and Fridays, could be from the 4th through the 7th. So let's not get greedy. From the low of 68 on April 14th, 180 degrees down is 60-61, 90 degrees down is 60. So let's move our protective stop a few ticks above the previous day's high and close out shorts at the old low of 60. We are taken out of our position on the 4th, price moves up on the 5th, then breaks 60 on the 6th. Remember, fast moves come from false breaks of obvious support or resistance levels, and 59 makes the low of 67 3/4, a 50 percent mark, and, thus a projection. Remember, important highs or lows can become 50 percent marks in the future. On August 7th, price moves above the previous day's high. But price is still in a very weak position even though the low came in on our time cycle. The next important time cycle is 45 days from high on August 19 through 21. The next important resistance is 68 or fifty percent of the range down, which is, also, the old low on July 14th. But if this stock is really weak, this drive up should fall short of that objective. The next day price gaps up significantly above the close and above the high of the previous day. We could trade it here for a few points since our protective stop would be very tight or 1/8 below the day's low of August 8th. If you were prepared on the 8th for that type of movement, you could have bought near the close, or definitely, with the gap up Monday. On August 13th, price gaps up, again, but closes weak. Let's move our stop up to the low of that day, as the gap could be an exhaustion move and price is still in a weak position from high and below a 50 percent mark. The next day we are out with a small trading profit. Next day is inside day, with the following day, August 8th, with-say a higher high and higher low. Now we have a dilemma. Was the 14th a one day countertrend movement in a fast move up, or is the 18th a one day rally or countertrend move in a fast move down? The 45 day cycle indicates that the highest probability is that price is at the end of a countertrend movement up and a resumption of a larger move down as price is still in a weak position from high and below fifty percent of range. We will let price tell us what to do. If price moves up through the angle from high, and above the 50 percent mark, leaving only a one day correction behind on August 14, then we will look to position long. But, if price goes down, then we will sell short and buy puts. The next day is a lower high, lower low and a close on the low. The next day- a lower high, lower low but a positive close and we establish support at 65 1/8. If that support is withdrawn then, we have valid evidence trend is down. Let's position short and buy puts on break of 65 1/8. The next day (August 21) we are positioned with a protective stop at 68, or slightly above an angle drawn down from the high of August 18. On August 26th, price rallies for one day, then down through fifty percent of last swing indicating a very weak position. We add to our shorts and puts on break of 63 1/4. We bring our protective stop down to 64 3/4. We get a one day rally off the old low on August 28, then down again, then a two day rally and down again through support on September 11.

Now, just so we don't get caught being bearish at the low, let's establish a reasonable price and time objective. From the April 7 low, 180 days is October 7; 90 days from high is October 3 through 7; and 30 days from the August 13, high is September 13; 45 days is 28-29. So the highest probability for a change in trend in time, is from the 29th through the 7th. In terms of price, the high at 76-77 gives vibration points of 72-68-63-60-56-53. From the first low in the drive down on July 14, at 67 3/4, gives 59 to 60, which was the nest low at 90 degrees. We could expect a loss of momentum at the next low, if down trend were to end. So, 45 degrees is 55, which is the same way peak price was found from 72 to 76. So our objective is 55 to 56 then 53. On the 45 day cycle, price is at our price objective- 55 to 56- so we close out all or part of the position. This would definitely include all the options and we move the protective stop to a few ticks above that day's high for the remainder of our position. We are taken out the next day.

Since the normal intermediate term correction (countertrend) is 90 days or three months, the next strategy for trading this stock would be on the long side. Possibly looking for a low on the 30, 45, 60 or 90 day cycles, and with that severe down trend, we might expect some base building before a move up, and possibly the three to four higher lows setup for starting a fast move up out of that base. McDonald's did form a base in October, 1986, and then resumed its bull trend.

MCDONALD'S WEEKLY CHART (MCD)

Look as the McDonald's weekly chart. We will see if it could have been of any help. The weekly chart can be analyzed very much like the daily chart for countertrend moves and weak or strong position by angles and fifty percent marks.

Notice the correction that ended the week of January 24, 1986-three weeks down (normal countertrend), stopping two points above the previous high of July 5, 1985, and correcting in points less than the previous correction. When the high of that week, January 24, 1986, was exceeded, you could have said to yourself: "If that is a valid low then MCD is in a strong position for a fast multiweek rally."

Notice the high that occurred the first week in July, 1985. One year high to high was the time period we were studying on the daily chart. A bearish workout of the one year cycle is high to high or low to high. A bullish workout of the one year cycle would be high to low or low to low. Therefore, the 90 day (13 week) "blow off" was, also, terminating a bearish resolution of the one year cycle. In the first week of January, this was a 26 week or 180 calendar day cycle from high.

Using the square of nine, 77 was one full cycle or 360 degrees from the July, 1986 high. It was one full cycle in time, as well as, one full cycle in price. Remember, fast moves come from false breakouts or breakdowns. So by the week of July 18, you would have known something larger on the down side was probable.

The one week countertrend rally, the week of August 18, started from 50 percent of the range from the September, 1985 low to high. Knowing in advance that price level of support, may have had us close out our short position and re-enter after only a one week countertrend movement became apparent. That low, at which we covered our short position based upon the analysis of the daily chart, would have been even easier to find if we had also used the weekly chart analysis. That low, at 55, was a bullish workout of a one year cycle with a 90 day blow off terminating the larger cycle. It was, also, 180 degrees in price on the square of nine, low to low. That was 360 degrees in time and 180 degrees in price. A classic set up!

SYNTEX DAILY CHART (SYN)

Look at the Syntex daily chart. Again, we are going to use this chart without the benefit of weekly and monthly charts. This would be foolish to trade from just a daily chart, but I want to emphasize the discipline necessary to be successful.

Notice, from the low on August, 1985, I have marked the higher lows. Remember, fast moves come from three or four higher lows. You could argue that the fifth low was really number four since the down day on October 22, was not much of a correction. But when the lows on November 18th and 20th were set in with the gap up on November 21 and 22, 1985, you should have been able to tell yourself, "If this low at 35 3/8 is truly a low, then it is the 4th or 5th higher low and is giving a bottom well above previous highs. This is how accelerations start. It is also 90 days low to low. I should buy it now."

From the lows I have drawn a trend line using a dash line. I have drawn a parallel trendline or channel from highs, also, using a dash line. This will be helpful as the low in November, 1985 was on the trendline. I chose Syntex as an example because it was in a powerful movement and I was personally trading this stock during this time period.

Now that we have bought at 37 to 38, let's get some price and time objectives, keeping in mind the powerful pattern that has started this movement, and the fact that we are only working from a daily chart.

TIME- Obviously a full one year cycle from the August 15th low plus or minus a few days- then May 14th through 16th for 270 degrees. It would be helpful if an obvious high or low comes in that time frame, as it would then indicate a 90 day "blowoff" of the one year cycle. Of course, the 315 day cycle due June 30th could indicate a 45 day "blowoff" movement completing the one year cycle. From the low on November 20th, 90 days is February 20th, along with 180 days from the August 15th low due between February 11th and 15th. So if price goes up into mid February, my long position is at risk.

PRICE- From the low of 28: 90 degrees equals 34; 180 degrees equals 40; 270 degrees equals 46; and 360 degrees equals 53. Of course, there are other highs and lows yet to appear, which will help confirm or invalidate those numbers.

The first correction on December 5th and 6th was only two days down, and established support at 40 1/2. A good place for a protective stop would be 40 1/8. On December 30th, price hits 180 degrees up- or 46. That's 270 degrees from low and a correction of 45 degrees to 43, or 90 degrees to 40, is now possible, as time is, also, close to 45 days and 135 days. In fact, 135 days to 270 degrees is a harmonic relationship and is, also, aspected with a conjunction.

Let's sell half the position, taking 7 to 8 points profit. On January 8th, there is a sharp break that holds the previous low and then starts up on January 16th. This is exactly how I analyzed this situation during that time period. On January 16th, price moved up, out of what appeared to be a good base, so I moved my stop to just below that sideways move or 41 3/8. Price moved up three days, then stopped me out on January 23rd, hit an old low and 90 degrees from high and 180 degrees from low for a "normal" correction against an up trend, as well as, a trend line. We took an additional 3 3/38 profit. January 27th sees a higher high, higher low, and back into the previous sideways movement. Obviously now, that is not resistance. Maybe this was a typical horizontal consolidation that occurs often in a strong bull trend. We buy the next day above 43 with a protective stop at 41. Next, it's one day down, then back up on January 31st. On February 7th, price tests the previous high at 46 and moves higher. But now my positions are at risk, again, with 90 and 180 day cycles, the closest resistance is 49 to 50, which is hit on February 12th. We then raised our protective stop to 48 7/8, which would be breaking the previous day's low. Stopped out the next day, we have 5 1/2 points profit. Price then breaks the low of February 7th, which at the time I thought was very important. The next day is down, followed by a gap up. The next day is a higher high, higher low. The following day is inside day. I decide that if on the 26th price breaks 47 3/4, I will get short with a protective stop at 49 5/8. The 26th brings higher high, higher low. I then remember starting to question my strategy of playing the short side. Looking back, it was exactly 90 calendar days and 135 degrees low to low. If price moves through 50 1/4, I have to buy with a protective stop at the low of that day. On January 10th, 44 days from low, price is near 53 or 360 degrees up from low at 28. We move protective stop to below previous day's low, and if broken, we will look to go short. Price moves straight up, and on March 21 it hits the parallel trend line. This is, also, 135 degrees from high. It is 225 degrees from the low of 40, and 360 degrees plus 45 degrees from 28 7/8 low. We sell the long position on a break of 57. At this time, I know that a high, which starts a trend down, seldom, if ever, comes from hitting a parallel trend line. That is balancing momentum. The typical price action for an important high is to move above that price level, but it fails to reach the parallel channel line after having just recently hit it, thus showing a loss of momentum. But correction is now probable. The next day I am stopped out with 6 1/2 points profit. The next two days price moves sideways in a small range and volume dries up. I have seen this pattern many times before. If price now breaks the support at 56 1/2, I will go short. It does so two days later on increased volume. My protective stop is above that day's high. My objective is to match the previous move down- or 52 1/2 (45 degrees is 53-4, 90 degrees is 50-1), in three to five days down. I close out my short position at 52 1/2 for 4 1/2 points profit. There is a small range on April 7th, which is 45 days from low. So I will watch the next day and see if it can show any strength. It gaps up and starts to move on volume. I buy at 53. With two days on the side, April 9th and 10th, I put my protective stop at 53 1/4. It moves up to the old high and stalls, falls two points on April 22nd, then on the 4th it rallies. Now, it should start moving up fast. It stalls again on April 29th, down one day, then sideways. Then on May 6th it gaps up, but leaves an island reversal on the seventh. If price breaks 56 1/4, Syntex is obviously not trending and I bought it because I assumed a trend (at least) to the 15th. I move my protective stop up to 56 1/4, stopped out (three points profit). Obviously, I don't know what's going on here- having thought 270, 90 and 45 days would produce a high, but instead, there will be a low. Price again hits the trend line with a 45 degree move down from high. Remember that 270 days and 360 degrees from low is a good harmonic or "setup". We buy on the move through 55 1/2. Price moves one day down on June 2nd. Price action looks encouraging. On June 27th, the 315 day cycle expires along with the 45, 90 and 180 day cycles a few days later, and, again, back at the channel line. I bring the stop to a few ticks below the June 30th low and am stopped out with 15 points of profit. We could now be down into the one year cycle. There is that pattern again. So we go short on a break of 70 1/4. One day up on July 9th, then down through the low. We move the stop down to 68 3/4. Price holds trend line (to my surprise) and charges up to stop me out with one point profit. Obviously, I don't understand what is going on. Again, if trend were down, price should not have shown a higher high above the previous swing high, so I will stand aside until the one year cycle expires. The one year cycle and 90 day cycle expire with price barely at a new high. At 74 to 75, price is at a significant harmonic from all the important lows (28-40-50-54-63), and 180 degrees up from the high at 58 to 59. So, we will go short on breaking a daily low, which price does on August 20th, with protective stop at 75 1/8. Price then moves sideways with that familiar pattern developing- a high followed with three or more small range days. I had a hotline service at the time and said on the August 26th update that Syntex is a stock that many years ago used to beat me up. I do not have a history of playing this stock well. However, this is an ideal setup. We go short on the break of 72 1/2, and, also bought a full position in puts. Price drops to 50 percent of it's major range and we take our profits.

During this exercise, I was confused most of the time about how the stock was going to move. Yet, by using a disciplined approach to trading based upon normal movement of price, I still managed to take 41 points of profit out during the year it trended upward, and 20 points after that one-year trend was over. Of course, a buy and sell strategy for that year would have produced the same results after commissions. But by trading the stock, my capital was never at risk for more than 1 percent. My profits, also, were never at risk and I was positioned when a fast movement occurred. During a workshop, I once used an example of a stock which was trending down, and we traded it from only the long side with this same discipline, and still managing not to lose any money, while being dead wrong as to the trend. Of course, the key is understanding trends and countertrend movements. Once you have mastered that, it would only take a few swings on the price chart to realize which side to trade. I hope by now you realize how important an understanding of price movement can be to a successful trading strategy.

AETNA (AET)

In viewing the Aetna charts, (supplemental materials) we will use some of the techniques we have discussed in previous chapters. You must remember that we are not attempting to call every movement in the price of a stock, but only developing or noting specific setups in time and price which are evidence of trend reversal. The idea is to take from these techniques what they will give us and nothing more. By using the long term cycles and squares, we may qualify the extent and duration of the price movement to some degree. We know to look for a change after 3 months or 90 calendar days, especially when price moves against the trend for that length of time, and 12 months or 365 days (360 degrees of one year) and multiples of such.

We will look for change on multiples of the low price in both price and time. We will look for angles to cross previous tops and bottoms which indicates a square of the range or divisions of the range as a 45 degree angle or 1x1 angle would square the range. A 2x1 angle is one half the square of the range, and a 1x2 is the second square of the range. We will give greater emphasis to the squares of ranges when still trading within the price range of that square, and we will use the counts to indicate natural times to look for change. We will look at squares of highs, putting emphasis on the square of the high in severe downtrends.

We will pay attention to the weekly counts in the square of 90 and 52, paying close attention to the square of 144 and 90 on monthly charts.

We will look for resistance and support at previous bottoms and tops, and look for multiple bottoms and tops as signs of support and resistance. We'll look for false breaks from those levels as an indication of a fast movement. We will look for angles to offer support and resistance, and, of course we'll always be aware of our fifty percent marks and the angles from those points. We will monitor true trend lines on all series of charts.

If you look at the month of October, 1984 on the Aetna monthly chart, you will see the 12th square of the October, 1974 low of ten dollars. That month was also the 120th month from the low or the end of the ten year cycle. This is confirmation from two sources of a possible change.

In July of 1984, Aetna had shown support at the 45 degree angle from zero from the time of the April, 1982 top by giving a strong reversal, and by October, 1984, price had moved above the 1x2 angle coming down from the April, 1982 high which put the stock in a stronger position from that top. Price was also showing support on a 2x1 angle from the July, 1984 bottom. This shows price in a strong position from bottom.

Now move to the Aetna weekly chart. You will see that the 7/27/84 low was marked by an outside reversal week up during the week before a 90 count. By Gann's original trading plan, the fourth year of the decade is to be a year of bottom, laying the foundation for a bull market in the fifth year. You would be looking for stocks which were showing signs of a bottom forming and then a bull trend starting. The outside reversal week up for a low price was a good indication of higher prices to come. Moreover, breaking 32 and recovering that price set up a "false break-fast move" probability.

At the start of October, the month of the 10 year cycle and the twelfth square of the low, price had been moving down. In the week of 10-12-84, and 130 weeks or 2 1\2 years from the high of April, 1982, from which the 45 degree angle from zero on the monthly chart was drawn, Aetna had a second outside reversal week up, following a three week consolidation. Support was shown on a 1x2 angle and, also, at a division of 90 or 11 weeks from a low. It, also, held above 50 percent of the swing producing a higher bottom. The stock could be purchased at that time with a protective stop one point below the swing low, or 32 1\2.

On the weekly chart I've numbered the higher lows. Notice how price either bottoms on top of the previous high or leaves a space indicating the probability of a fast move.

Again look at the Aetna monthly chart, and we will look at time periods, angles and general tools. There is a high at 27 in November, 1972, then another high at 27 in 1964 (not on this chart). So when price moved to 27 in October, 1973, there was a possibility of a double top 11 months apart at the level of an old top of 10 years standing and a third attempt at that level. This evidence leads to the understanding that the outside reversal month down at the price level of 27 was a good indication of trend change. Of course, the next move against 27 would be the fourth test, and likely go through. After that month, resistance was shown at angles from top. Price moves down through 50 percent of high to find support on a 45 degree angle, starting at zero from the date of the high, in the 12th month from top(almost exactly 365 calendar days from top). The sharp reversal up was an obvious indication of trend change, and was confirmed by price moving above the 45 degree angle down from top.

In July, 1975, price shows resistance at 50 percent of the range both price and time. The preceding month, price showed resistance against the true trendline. This was followed by a three month correction (90 calendar days) down into a conjunction of angles moving up from zero in September, 1975, giving a higher bottom.

In the twentieth month from the low, price made another higher bottom at the time of the second square of the low, and, 12 months from June, 1975 top. This low price came against the 1x2 angle from zero from the date of the 10/73 high, which had proven support before. Note the outside reversal month up. Again, a three month correction down into the third square of the low in April, 1977 brought price down to a 45 degree angle from zero, from the date of the September, 1975 low, and was marked by an outside reversal month up in which price moved through the 45 degree angle down from the December, 1976 top.

Price turned down in the 45th month from top, and proceeded to find bottom during the month of the fourth square of the low which was, also, six months from a high. Price gave another higher bottom. April of 1982 was the 9th square of the low and a 90 month count from the same low, which was a time to look for a fast movement. Price had moved from the February, 1981 low- up, finding a low in the sixth month of the drive and a high in the ninth month, and by the anniversary date of that low in February of 1982, price had been moving sideways for three months in a volatile fashion. The monthly chart is showing price resistance at the high set in November of 1981, and support on the 45 degree angle up from the February low.

Now move to the weekly chart. Again, the weekly charts show there is significant resistance to price advance. It shows this for four months, with two attempts at $48 per share, three months apart. So, there is a possible double top on the week of 3/5/82 and the high of the week of 12/4/81 squares with low on 8/28/81, as shown when a 45 degree angle from 12/4 top crosses $35 price level. When that same angle crosses the price level of $30 (the low of the week of 2/20/81), it shows the square of a major range and price gave the possibility of triple top at that time.

So, in the week of 4/9/82, with a major weekly range squaring out, and knowing that if price moved down it would produce a triple top on the chart, you may have been looking for a trade. You might have added to this evidence by the fact that this week was 52 weeks from the first higher low in the drive up (the week of 4/10/81). You will find that as a trend reverses or during a long sideways pattern, the one year cycle from most highs and lows can produce tradable vibrations. If the trend is down then look for low to high or for high to high from one year cycles. Again, as the general rule, the third move through that zone usually results in a fast movement in the opposite direction. The forth movement against a zone will usually go through that price.

In the week of 4/9/82, you could have positioned short at the old top with stop three points above it. A second method of positioning would have been to wait until the low of that week was broken. The next week produced a fast move down into the price level of the monthly 45 degree angle at 44, which was broken, but offered some support.

There is another very good set-up showing here. Whenever a stock or market hits a high price, reverses, then trades in a narrow range on light volume, as Aetna did in the time frame of 4/23/82 through 5/7/82, and then breaks down through that range on increased volume, it is a very good sign of lower prices. So in the week of 5/14/82 there was a further indication of lower prices from the breaking and it's inability to recover the monthly angle. This followed by the high, and then sideways movement at a lower level, and on light volume, and finished by the breaking of the low of the sideways movement, backs this up further. Since price moved through the monthly 45 degrees angle up from low, and was well below the 45 degree angle from top on the weekly chart, it qualified it as a weak position. There was a good probability of a fast move down, lasting for at least 90 calendar days, or three months, possibly more.

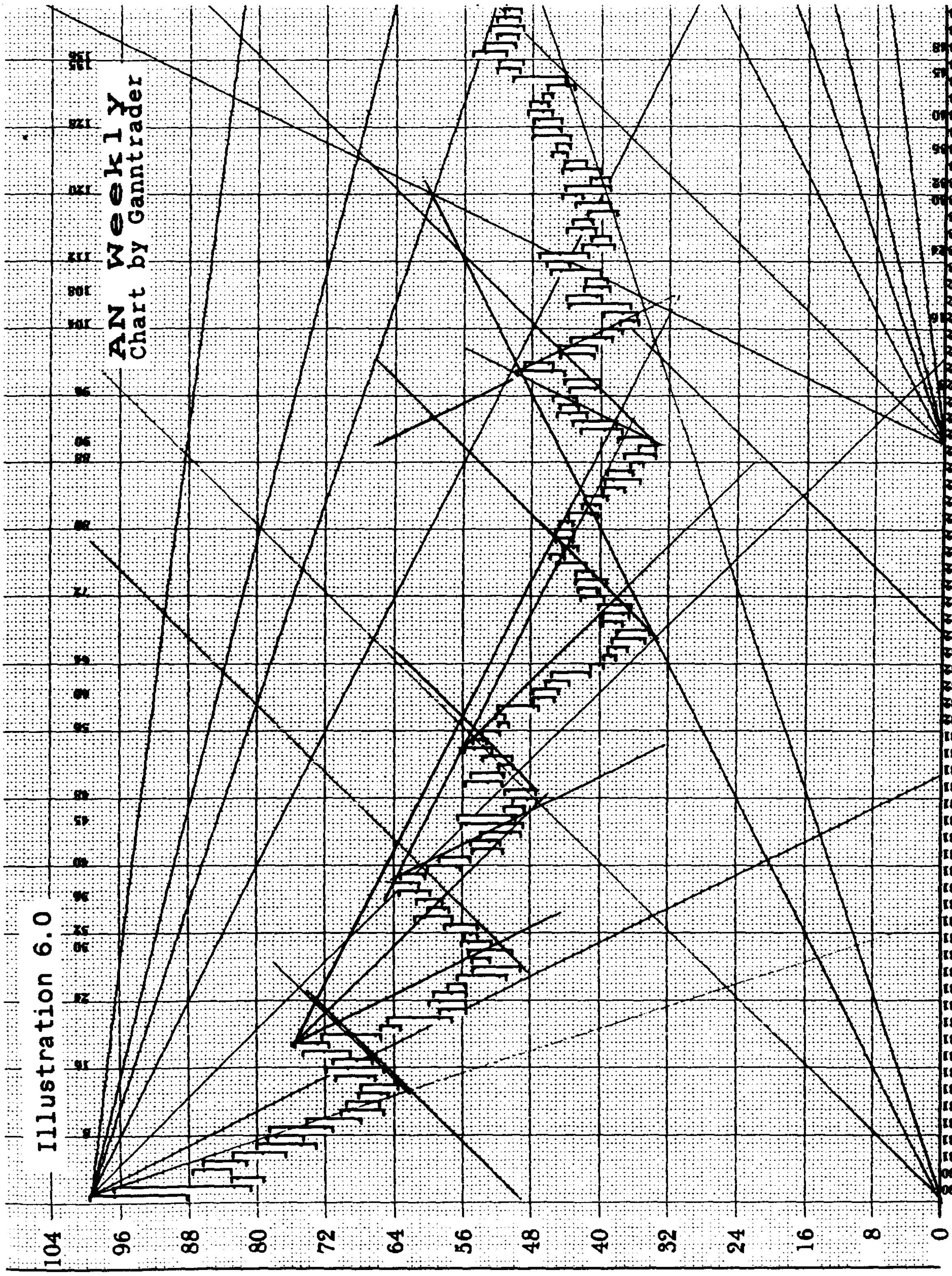
Aetna found support on the eleventh week count from the high week, and at the price level of the higher low in April of 1981, and began trading in narrow range on light volume, an indication that the liquidation may have ended. Price moved through the 45 degree angle down from the high in July of 1982, putting it in a stronger position, and by the week of 8/20/82, on the square of the range from the April top to the February, 1981 bottom, price is showing a possible bottom, marked by the small range of movement for a number of weeks, and the support level at 33 having not been broken in three attempt- a possible triple bottom.

On the monthly chart, July of 1982 is three months from high, and August of 1982 is 1 1/2 years from low, or 18 months. From the low made on the weekly chart during the week of 8/13/82, price moves up for 10 weeks, then reverses and spikes down on the eleventh week- volatility is a sign of top- and then reverses back up during the twelfth week to find high 90 days or 13 weeks from the low. The next drive down lasts for 13 weeks.

You should now study this monthly chart. Notice how support and resistance shows on zero angles, angles from 50 percent and true trend lines. Count the number of months to counter trend moves. For instance, the low in February, 1983 was on a 45 degree angle from 50 percent of the high. If you had evidence on the daily chart for a double bottom against the June, July, and August lows in 1982, where would you look for resistance in time? The move down was three months (90 days), which was, also, six months (180 days) from low. So in April, 1983, time is one year from the all time high of 48 (12 months is 1/4 of 48 or 1/4 of the square of the high), six months from high, nine months from low (270 days), and three months from low. Check the Square of Nine for price, in this instance 180 degrees from high and low. You should check all moves with the square of nine for price.

AMOCO (AN)

There are two things to note on the Amoco weekly chart in regards to angles (Illustration 6.0 & 6.1). First, the conjunctions of angles, where price moves into two angles such as a 2X1 and a 1X1, are very strong support or resistance as is shown by the weeks of June 10, 1983, and October 15, 1982. And second, angles up from zero from the dates of significant highs and lows are important, as was shown by the support that was found at 47 the week of 10/23/81 was from a 45 degree angle drawn from zero from the date of the December, 1980, top.


AN Weekly
Chart by Ganntrader
Illustration 6.0
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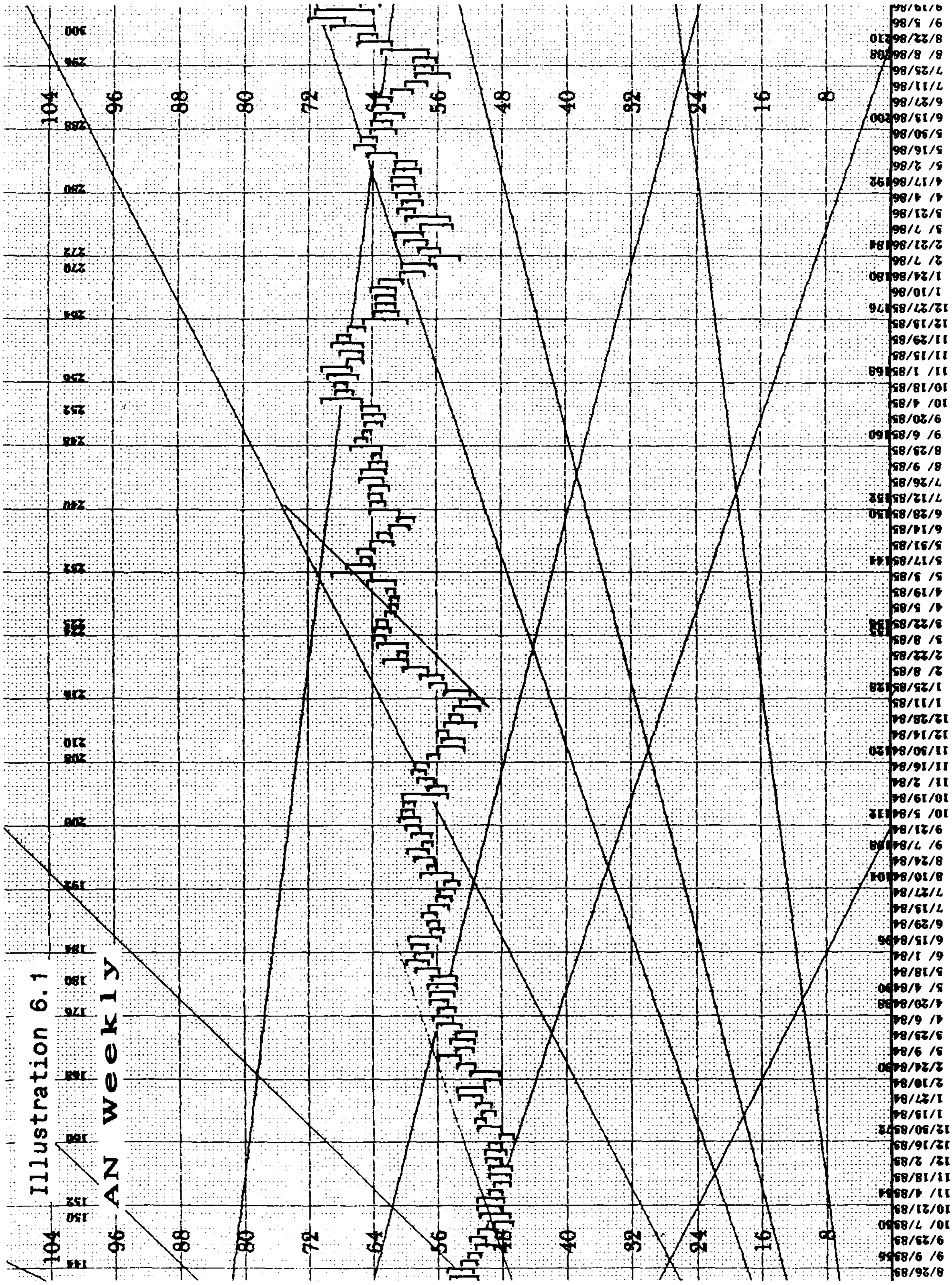
Illustration 6.1
AN Weekly

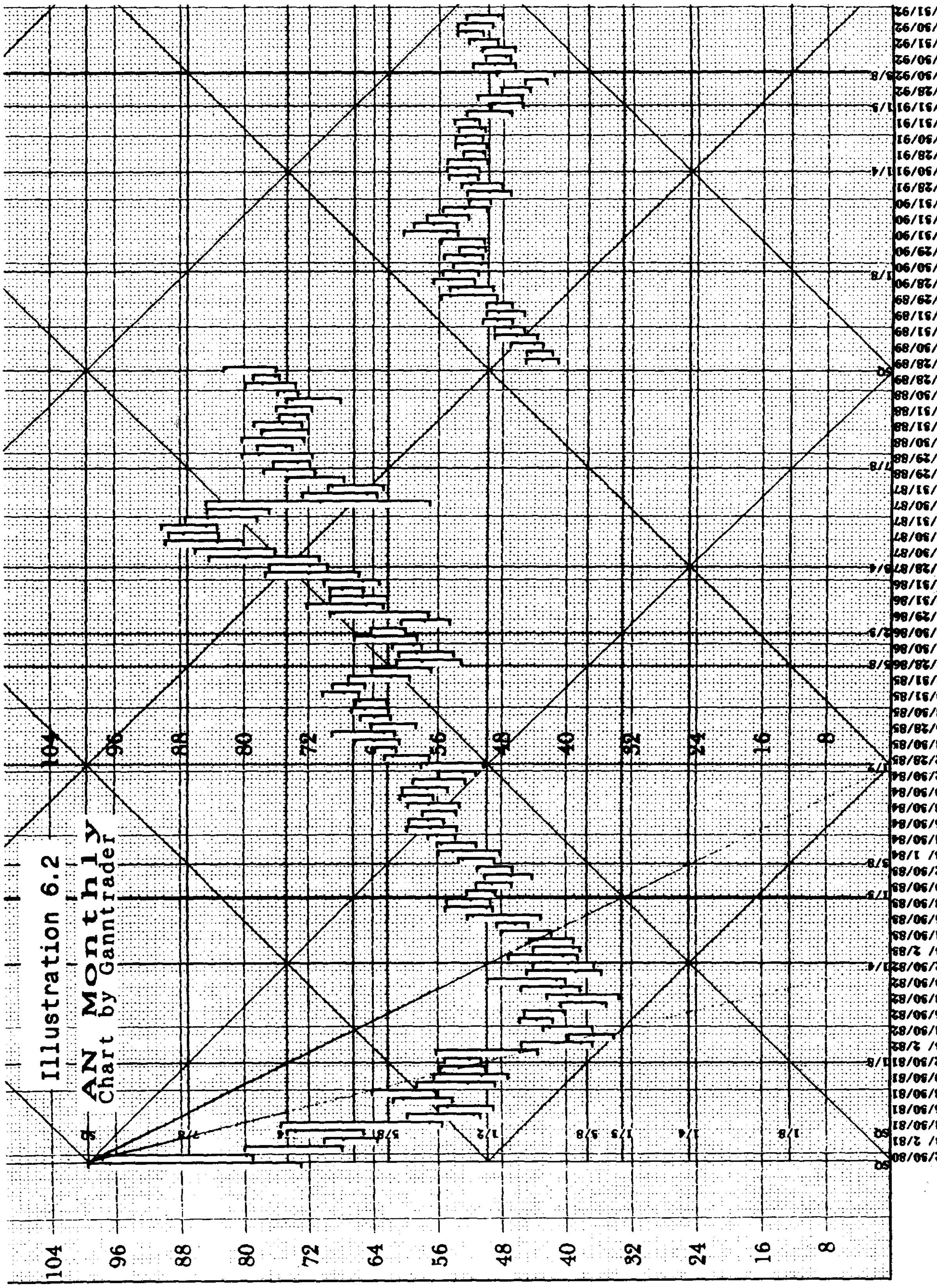
Illustration 6.2
AN Monthly
Chart by Ganntrader

Now let's look at some squares of ranges on the Amoco weekly chart. The 1X1 or 45 degree angle that starts on 34 reaches the price level of 55 3/4, the price level from which the down movement started, and squares that price range during the week of 8/13/82. That range of movement from the week of 12/4/81, and a price of 55 3/4 to the low of 34 during the week of 3/12/82, took nearly 90 calendar days to complete. The range which squares out in the week of 8/13/82, does so during a week that is 13 weeks from the last high price in the stock, 90 weeks from the high price, and one year from the high on 8/14/81. There was ample evidence to look for a change in direction, and again, price showed support at very near the level of the previous low at 34.

When that same angle up from the low of 3/12/82 crosses the price of 64, it indicates the square of the range of movement from the 34 low to the 64 high. At this time, the week of 10/15/82, price had moved up to the 1X2 angle down from the high, and was up against the price level of 49 3/4 for the first time. This would be a good time to look for evidence of a change in price movement.

At first glance, 49 3/4 might seem like an unlikely price to stop an up move in Amoco. However, continuing with the Amoco weekly chart, and now looking at 50 percent marks and their effect on price action, you see that the high is at 99 1/2 and 50 percent of that high is 49 3/4. The first time price comes down to that support is on 6/5/81. You should know that when you are considering a position against a down move at fifty percent of the high, the first time against that support level is the best time to look for a reaction up from it. Once that price level is exceeded to the downside by 3 points, the stock is in a very weak position. The first time price rose back up to the 49 3/4 level was in the week of 10/15/82 and immediately sold off 6 1/2 weeks. There was a second method of proving resistance at that price level during that week, and that was by taking the low at 33 1/2, dividing it by two to produce 16 3/4, and adding this result to the low price, yielding 50 1/4.

The next major fifty percent mark would be fifty percent of the range from the high to the low or 99 1/2 less 33 1/2 for a range of 66. Fifty percent of that range is 33 added to 33 1/2 is 66 1/2 or the fifty percent mark. Of course, two times the low of 33 1/2 is 67 and that is a strong resistance point. The first time against this level was in the week of 5/3/85. Price had a sharp reversal the next week and gave a 6 1/2 week correction down.

Gann emphasized that when a major support angle is broken, be sure to check for an old fifty percent mark which may offer support.

Now let's look at the square of the high on the Amoco monthly chart. The high was 99 1/2, and counting over 99 1/2 months, the 45 degree angle running up from 0 from the date of that high crosses the price of 99 1/2. The 45 degree angle running down from the top of 99 1/2 will hit 0 at 99 /2 months over from the top.
Where those two angles intersect, which is 49 3/4, is fifty percent of the high price, or fifty percent of the square of the high in

price. The 2X1 angle from the top hits 0 on the date of 50 percent of the high in time, or 49 3/4 months over the top. This is the month of 1/31/85. As you can see, price was, also, at fifty percent of the high price, an obvious place for support. Price moved down into that time and price, and was, therefore, at a point to buy with protective stop 1 to 3 points below the 45 degree angle. (Illustration 6.2)

In my testing of these methods, I've found that the square of the high becomes quite accurate when dealing with stocks in several bear trends such as the oils in the early 1980's, and other stocks that have moved below fifty percent of their highest price. You can see that Amoco did not go lower after the 90th week from it's high week on the weekly chart (of course, 91 weeks is 1 3/4 years), and that by the time of the square of the high on the weekly chart, the stock has shown bottom and is beginning to rise. We saw that fifty percent of the highest price proved accurate, so look for the full square of the high on the monthly chart to be evidence of a significant change.

AMERICAN EXPRESS (AXP)

On the American Express monthly chart (supplemental material), the 45 degree angle down from the June, 1981 high crosses the level of the March, 1980 low in September, 1982. August of 1982 was the low month from a drive down, and produced an outside reversal month up. When September came, price moved up to the level of the previous high, and closed there, which was a point to expect resistance, so this square of a range, and the price action was misleading. It did not work. September was a year and a quarter from the previous high, and 2 1/2 years from the March, 1980 low, so there was ample reason to look for change. Of course, there was some evidence for August to be a point in time to look for a change. It was three years from the 1978 high, and seven years from the 1975 low, and five and six years from important dates.

Now, remember our rule that when price moves above the 2X1 angle down from top on a monthly chart, the down trend is at least temporarily over, that any short positions should be closed out, and you should be alert for buy setups on weekly and daily charts. Viewing the Aetna monthly chart and the fast moves down should show you the validity of this application of the angles.

The square of the range from the low in August of 1982 to the high in June, 1981 comes in the month of June of 1983. This was, also, 24 months from that 1981 high or the second square of 52 on the weekly chart (104 weeks), or 720 (730) calendar days, which is all the same measure of time, on different charts. If you look at the weekly chart you will see that the high week was 45 weeks from a low or 315 calendar days, which is 315 degrees of the yearly cycle. Gann said that you could look for top 45 days before the anniversary date, and you should do this, but add other evidence.

In this case, a higher low was made in 12/17/82, from which 180 days or 26 weeks gives the week of 6/17/83 to look for a change in trend. From the low in the month of March, 1980, the weekly count of 169, or 3 1/4 years, also, was indicated that same week in June of 1984. Also, notice the ten weeks of sideways movement which is sufficient time to allow for distribution and a change in trend.

There are two other noteworthy items on the weekly chart. First, if the down move started from the June, 1983 high, it would come from a false move up, or a move to a new high that quickly broke down, which is called a false break out. Fast moves often start from false breaks outs or breakdowns. Second, the 45 degree angle up from zero from where the bull move started in August of 1982 was broken the week of July 8th, 1983.

I have drawn some partial squares on the weekly chart. From the high of 6/24/83, the 45 degree angle crosses the price level of 17 1/2 during the week of 2/3/84 or 2/10/84. This is the square of the range from high to low, and is a turning point on the weekly chart. The low at 17 1/2 and the high at 49 1/2 gives a range of price movement of 32 points. Of course, 33 is a natural cycle, and you could look for support to be found in the 32nd or 33rd week and the square of the range in price, especially if it was 1 1/2 years from the low price, or 78 weeks. As it turns out, this was hardly a tradable setup.

The 45 degree angle up, from the level of the low price on the date of the high price (6/24/83), is the basis for the full square. The price level and date at which the 45 degree angle from the top traveling down, and the degree angle 45 from the price of the low on the same date as the high, traveling up, intersect is both 1/2 of the square of the range in price, and in 1/2 of that square in time. To visualize this another way, if you converted that range of price movement- 32 points, to a circle, 16 weeks would be 180 degrees of movement around the circle from the starting date, and 16 points would be that same movement in price.

The sixteenth week after the high price was achieved would be considered a weekly turning point, but the easily tradable setup would be if price was, also, at 50 percent of the range, or 33 1/2. This would be the fifty percent price and time setup we have discussed before.

Fifty percent of the range of price movement at 33 1/2 in this instance, is very important support, and will signal whether the stock is in a weak or strong position. If the stock trades below fifty percent of the range, it is in a weak position and you would look to the square of the high price for support and timing after that 50 percent price on the range was broken. The high is at 49 1/2, and fifty percent of that high is 24 3/4. So for price support, 24 3/4 would become very important, and in time- the 24th to 25th weeks, and the 49th to 50th weeks.

On the American Express chart there is another range to work with from the low of 12 1/4 in March of 1980. If you haven't already noticed, the high at 49 1/2 is at four times this low price, and 24 1/2 would be twice the level of that low.

Every time the 45 degree angle moving down from the 6/24/83 high, crosses the price level of a previous low (which occurred during the drive up to the high price), this indicates a square of the range in time. You can anticipate the probability of a price reaction during that week. These squares of ranges are marked on that angle with the small arrow. When this same angle reaches the level of zero in price, as it did in early June of 1984, this is the full square of the high in time, a powerful turning point if 50 percent of the range has been exceeded to the downside.

The 45 degree angle up from zero from the date of the 6/24/83 high completes the square of the high. Where the 45 degree angle down from the high and the angle up from zero cross, is 50 percent of the square of the high in both price and time. In time, this is considered a probable turning point, and in price, this level is important support. When the time of the full square of the high comes, price is at the fifty percent of the high support level, and on the 1X2 angle up from zero from the date of that high. This is a good setup to go long.

As it turns out, this long play would have been a difficult one for an option trader, or a short term trade. However, a stock trader could be looking for the start of a new bull move from the bear move down expiring at the square of the high in time. For a longer term stock trade, the long position could be taken from the setup here, and a stop placed one point below the fifty percent of the high price.

When a stock or an index is moving sideways, that is, it is not in a trending situation, the squares of minor ranges of movement become very important and accurate indications of a possible change in price action. This is the consolidation timing method. When 45 degree angle down from the May 18, 1984 high hits the level of the 6/1/84 low, a minor turning point is indicated. From the June low up to the level of that previous high in May, a better, weekly turning point is indicated. Of course price support was known that week, and the double bottom at 25 was a bullish setup. Price action from that week is a good indication that the trend could now be changing to up.

After that low at 25, as long as price remains within the range of movement from the 49 1/2 high to this low, the square of this range can be used to develop turning points and price support and resistance. Fifty percent of the range in price is 37 1/4. By bouncing the 45 degree angle up from the 7/24/84 low off the level of the high, and back down to the level of the low, you have both the square of the range, and two times the square of the range in time. Of course, the 1X2 angle, or slower angle from the low, also, indicates the second square of the range when it crosses the level of the high.

The first square of the range is in the week of 1/18/85, and price was moving sideways into this time period just above the fifty percent of the range price level. In addition, price was showing increased support through a series of higher lows. Since the low price is 25, the square of the low is the same week, and is indicated on the chart by the 45 degree angle up from zero, from the date of the low crossing the price level of the low. Of course, this is a good turning point, but with the price moving sideways, it becomes more difficult to judge the direction of the move out of the turning point. The support from the 1X2 angle from the low, and from 50 percent of the range is important support. Because of the sideways move, you would be looking to position with the direction of price movement out of this turning point in time.

The second square of the range and square of the low is just as interesting a setup as the first- with price near the old high. To make this even more interesting, note that from the June, 1983 high to the beginning of the basing formation for the low, is approximately 52 weeks. The drive up from the low price is very near the old high in the 104th week from the same old high. From that high in the week of 6/28/85, the drive down, in the 13th week, is showing a definite basing formation, for a 90 day correction to the bull trend.

CATERPILLAR (CAT)

Now use the Caterpillar monthly chart (Illustration 6.3) A significant square of range on this chart is from the 1981 high to the 1974 low. The 45 degree angle up from 26 1/4(the low price), and from the date of the high or 4/30/81, shows a range of 47 points and months when it crosses the level of the high. Where this angle from the low intersects the 45 degree angle down from the high, indicates fifty percent of the range in both price and time. This range of 47 points or months, when divided by 2 is 23 1/2. This added to the low of 26 1/4 gives you fifty percent of the range or 49 3/4, where those angles intersected. So when price moved into that zone of resistance for the first time in May of 1983, you could look for evidence to go short or to buy puts. Also, 150 percent of the low of 33, or fifty percent of the low of 33 added on to it, was 49 1/2, which made that price level even more significant. Another bit of evidence for change at this time, was price had moved up to the level of 24 points below the high in the 24th month from the high, giving a square of price and time. However, the important setup is the fifty percent in price, and fifty percent in time setup.

Also, you can see when Caterpillar was moving down in 1981, price found support in October, 1981, at fifty percent of this same range at 49 1/2 and gave a rally. How much of a rally can you expect when showing support at fifty percent of range? If you are dealing with the current swing range and 50 percent is hit within three months or 90 days, you could look for a significant bottom. But in most cases, when support is shown at fifty percent of range, you can be assured of a minimum movement to 5/8 of that range in price.

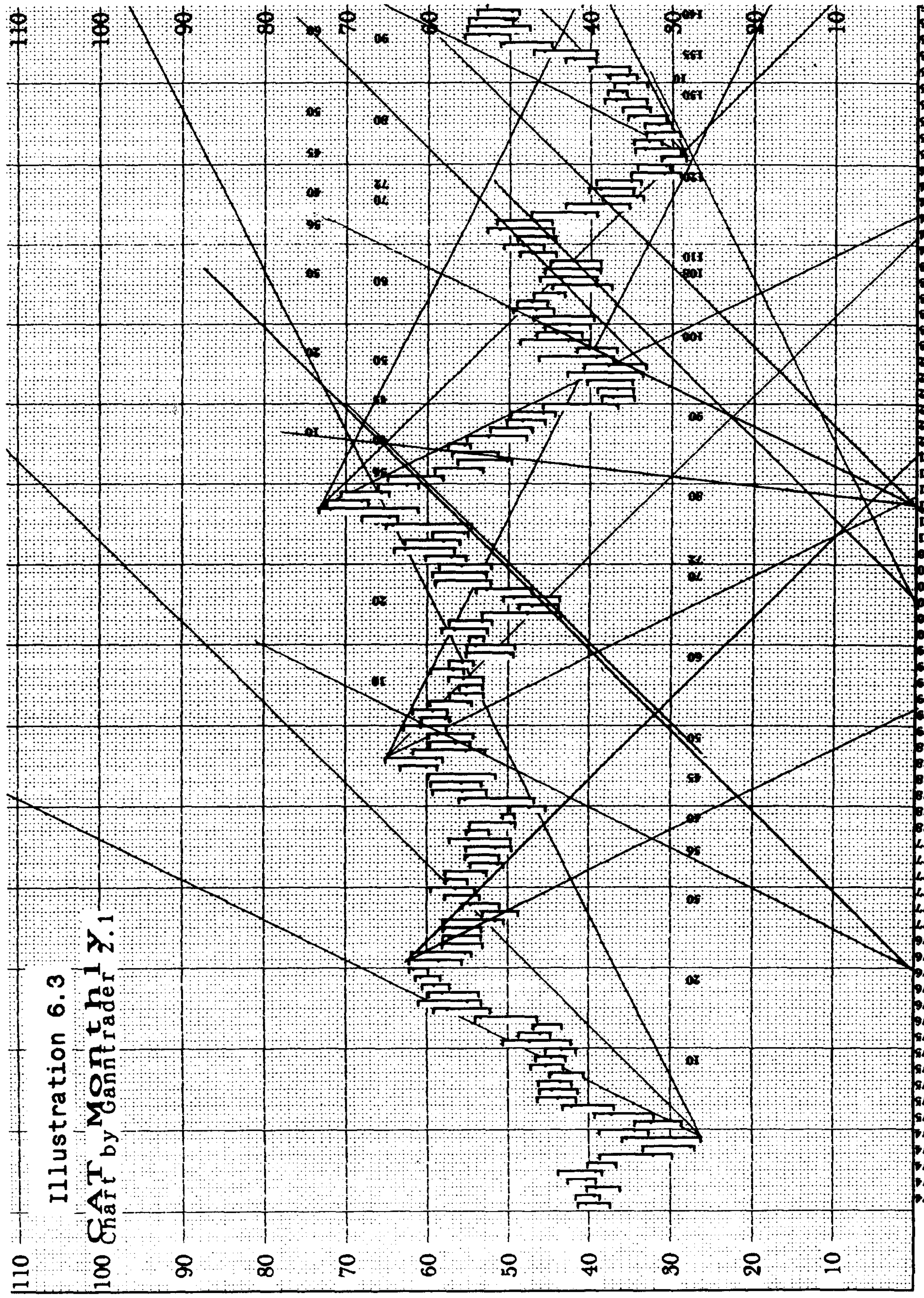
Illustration 6.3
CAT Monthly
Chart by Ganntrader 2.1

On the weekly chart (Illustrations 6.4 and 6.5), this test of 49 1/2 came in the 26th week from high, or 10/23/81. You can see that the next top in March of 1984 was, also, at fifty percent of the range from the 1981 high to the 1982 low. Price was in a weak position on the monthly chart because it was trading below the 2X1 angle down from the high.

Continuing with this price level on the weekly chart, in the week of 3/30/84, price had completed an Elliott five wave move. Price was at fifty percent of the range, was 78 weeks, or 1 1/2 years from low, one half year or 26 weeks from the 9/30/83 high, and 1 1/4 years or 65 weeks from the 1/7/83 high. It was at the top of channel and against resistance. A setup worth trading.

Another use of fifty percent of range is to help qualify the strength or weakness of a stock or group of stocks. As long as a stock remains above fifty percent of its previous swing range, it is in a strong position. If it finds bottom a little above fifty percent of range as the S&P did on 7/27/84, you would consider it in a very strong position. Also, if the markets had been moving down and you felt a corrective move was over, you would look to buy those stocks that were at or above fifty percent of their swing range. You could narrow that selection down even further by finding those stocks on daily charts which had given rising bottoms as the market was giving flat or lower bottoms. Caterpillar had a low in July, 1970 at $20 per share. So you can start that count at July, 1975 at 60 months or 5 years. If you carry it on out, 135 months is the month of October, 1981. Also, there was a top in July, 1956, so the 240 month count would be July, 1976, which was 6 years from the 1970 low.

October, 1984 was 120 months or ten years from a bear market low, or the expiration of a 10 year cycle. Since price moved down hard into that month, you would look for evidence of a bear move to end. Now we know that it takes time for accumulation to occur before a move up can take place. The longer the accumulation in time, the better the chance of a sustained movement. During March of 1985, price gave a higher bottom, which was, also, a triple bottom matching October and December. March is 60 months from previous bottom, 84 months from bottom, 12 months from top, and the full square of the range from the 1981 high to the 1974 low. Obviously, this was a fine time to look for the trend to turn up.

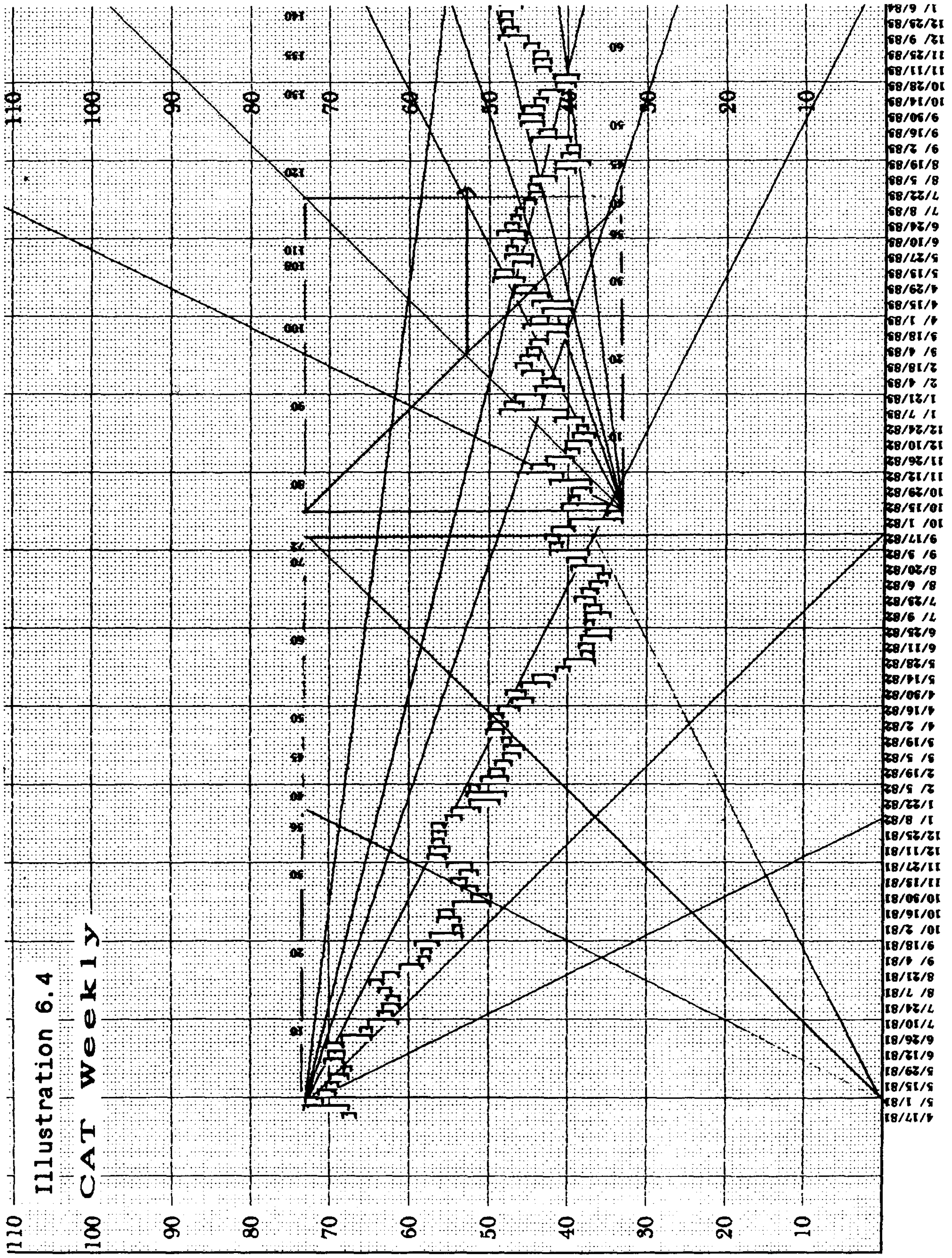
Illustration 6.4
CAT Weekly
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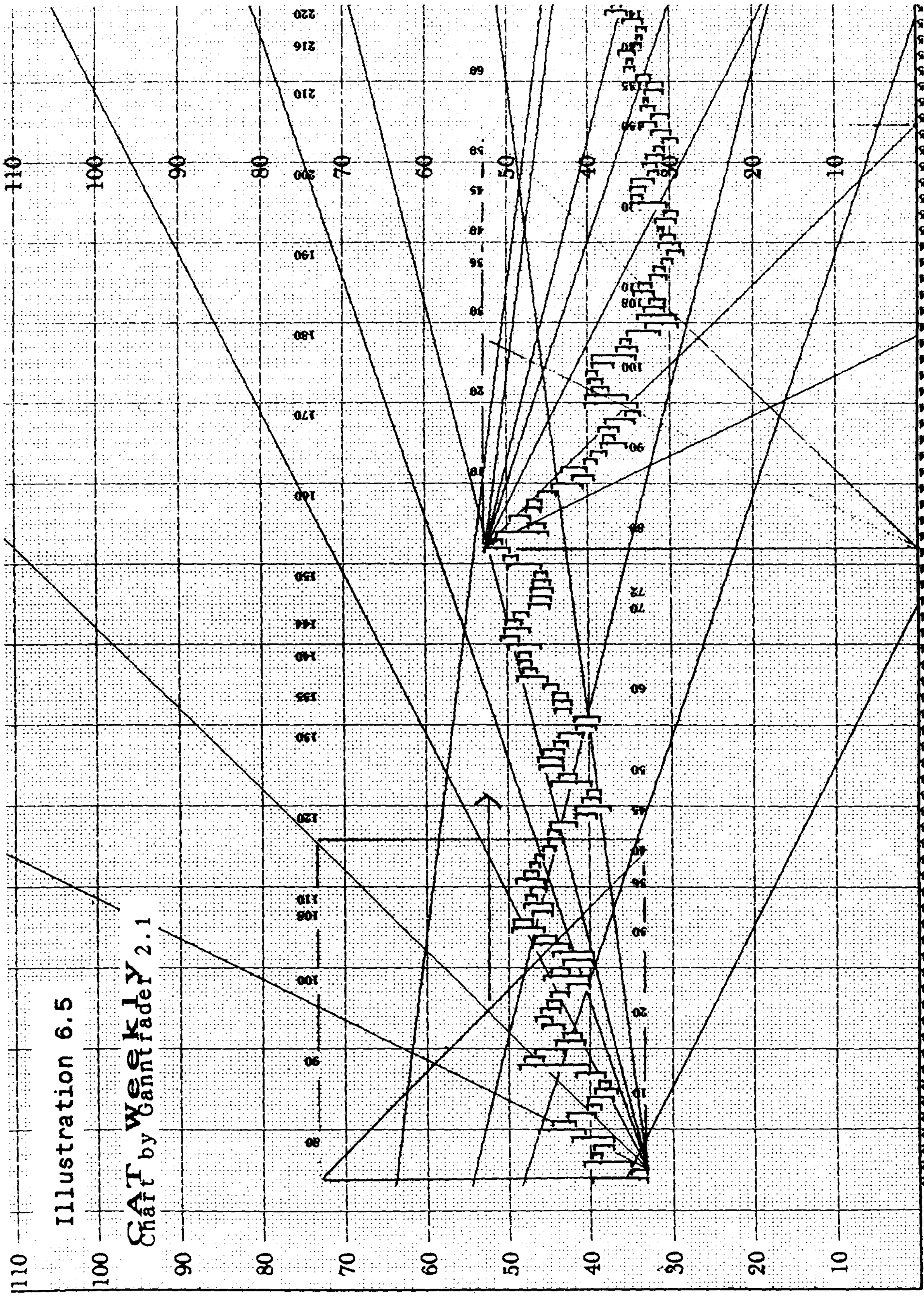
Illustration 6.5
CAT Weekly
Chart by Ganntrader 2.1

CONTROL DATA

Now use the Control Data weekly chart (Illustration 6.6). The square of 90 and it's counts can be quite effective with weekly charts, especially when combined with other techniques. Remember, what we are trying to locate on the charts are specific setups in price and time. Then look for a change in trend.

In Control Data, price made a low in the week of August 13th, 1982, and then drove up. The first low in the drive up came very close to the 7th week of the last drive, and the 13th week of the drive produced a consolidation which lasted for eight weeks, ending with an outside reversal week up on the square of the August low. This is shown when the 45 degree angle up from zero and the date of the low crosses the price level of the low. At twenty-two weeks from that low in the week of January 7th, 1983, and twenty-six weeks from the lower high during the consolidation move, the high of the move was found in June of 1983. That high is, also, 52 weeks from the momentum low of the move down into bottom during the week of 6/11/82.

In the drive down from this high, there should be price support at fifty percent of the range from the August, 1982 bottom to the June, 1983 top or a price $42 and $43. Price moved down to 43 in the week of 10/21/83, which was, also, the third square of low, and this produced a 2 1/2 to 3 week rally. But resistance was found at $49, or 3/4 of the square of the high. I would like to point out the value of the use of the cycle of the years, from all significant highs and lows, such as momentum lows and lower highs in a drive down. So, note that 13 weeks from the high produces a lower high, and that 13 weeks from the lower high in the week of 7/22/83 is very close to being the first test of the fifty percent of range. From that same July high, 26 weeks, or 180 days is the week of January 20, 1984, and 1/2 of the square of the high.

In the week of 11/18/83, price was down 22 1/2 points in 22 1/2 weeks, which is a squaring of price and time. This can be seen by price showing a low exactly on the 45 degree or 1X1 angle down from high. These are divisions of the square of 90. Again price is testing 50 percent of range, and produce a second bottom. At that point, you could look for a change, but would ask yourself how far can this rally move? Of course, you could look for a three week rally, which would be the normal move against a bear trend. Also, you can look at the resistance zones on the weekly chart- 49 or 48 1/2 which was 3/4 of the high price, the 45 degree angle moving down from the 9/9/83 top, and the 1X2 angle moving down from the 6/10/83 top which had proven itself twice as resistant.

In the week of 1/20/84, price was against two proven resistance points, the 48 1/2 zone which had shown resistance on 11/4/83 and the 1X2 angle from top. Moreover, it also was against fifty percent of the square of the high in time. The nine week movement in to that resistance setup was very unimpressive or weak, and as I pointed out earlier, this week was 26 weeks from the first lower high in the drive down. Now, besides all of this evidence

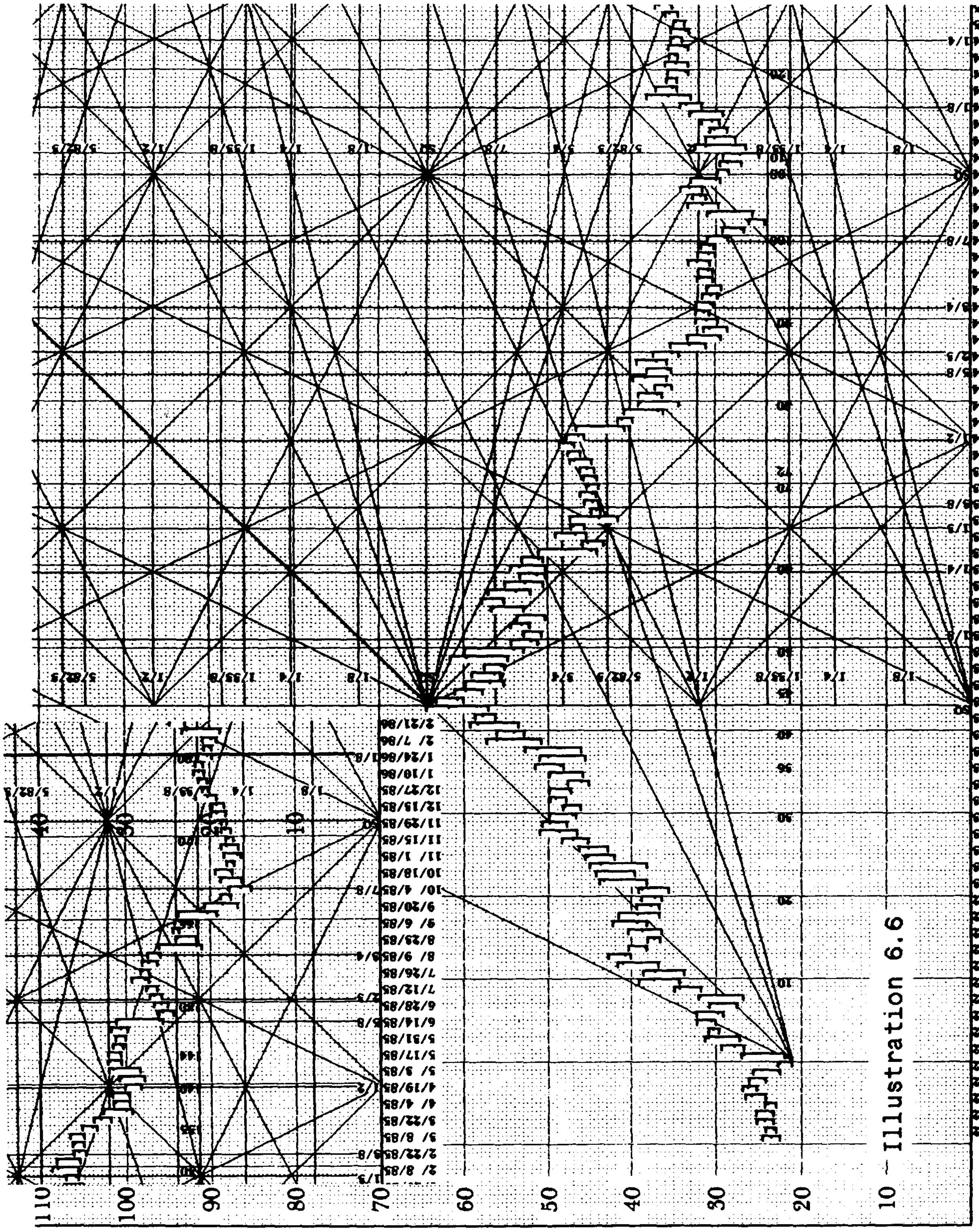

Illustration 6.6

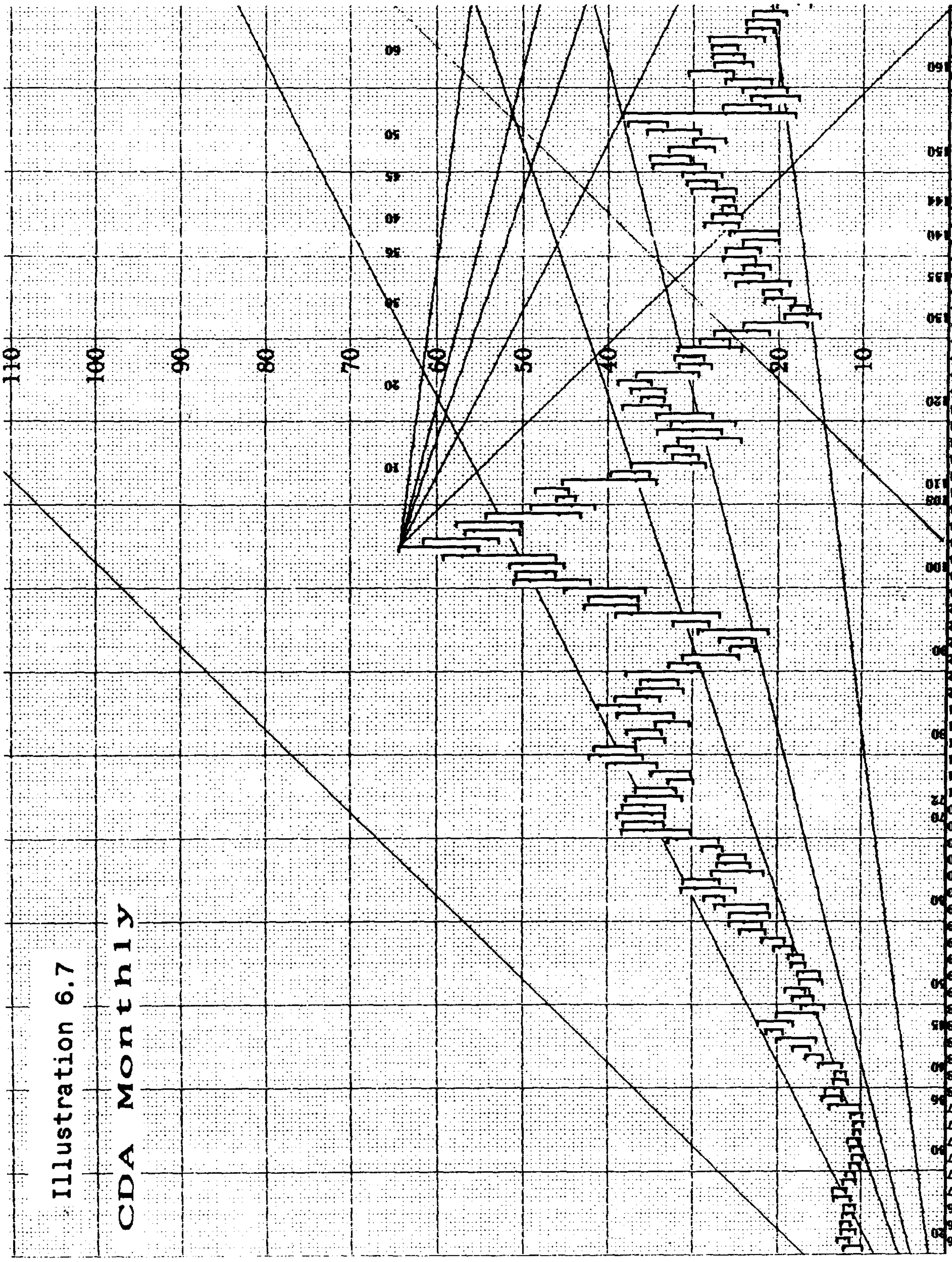
Illustration 6.7
CDA Monthly
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for resistance to a move up at this point, you can add the fact that this is the third lower high, and fast moves often come from third lower highs and third higher bottoms. The resulting fast move down breaks through fifty percent of the high on the 13th week of the move, finds support during the 14th, and price wanders sideways just below fifty percent for 7 weeks before breaking the resistance level and falling. From that low week of 4/27/84, to the low in the week of 7/27/84, is 13 weeks. The low was found at 3/8 of the square of the high.

On the Control Data monthly chart (Illustration 6.7), the high is 64, and the square of that high in time is shown by the 45 degree angle moving up from zero, from 6/30/83 and crossing the level of the high. When this angle intersects the 45 degree angle drawn down from 64, it is at fifty percent of 64 or 32, both horizontally and vertically, or in both price and time. So, these price levels and time periods become important in any analysis of the stock's price action.

Returning to the the Control Data weekly chart. As to significant price levels, there are four areas. First, there is the division of the square of the high, fifty percent of which is 32, and 3/8 is 24. You'll notice 24 proves support twice for significant bottom- 7/27/84 and 6/21/85. Once those bottoms were broken on 8/16/85, the first move up against those bottoms or the 3/8 level would offer resistance, as happened from 8/30/85 through 9/6/85. So the square of the high gives 24 and 32. The square of the last range of the movement from the week of 2/8/85 through the week of 10/4/85 has fifty percent of its range at a price of 27. Also, 27 is 1/4 of the major range, which you could locate by extending the 1X4 angle from the bottom hit on 10/4/85 out to the end of the square on 9/10/86. In addition, you can see that 50 percent of the major range is at 40, which you can find by following the 1X2 angle to the end of the major square.

From this we know that the first movement against 40 would be a point to go short, an ideal point to go against the move up, and one of the highest probability resistance points you'll find on the chart. Since the low on this stock, or current low, is 15, and 100 percent of that low would be 30, which would be a resistance point, also. The idea you to take from this is, to project into the future, using significant highs and lows, their divisions for support and resistance, and the cycle of the years as evidence for positioning in trades.

DISNEY

Let's go to the Disney charts and do some normal chart reading looking at the normal cycles. Start with the daily chart and please cover up "Future" price action so that you can get a better grasp of the movements (supplemental materials). Starting on 9/16/85, price rallies 5 days and then corrects for 5 days into a rising bottom. On October 7th or 8th, price moves sideways and then up for seven days, moving above highs going back to July. Price then moves down for seven days into 10/28/85, for a third higher bottom. A fast move starts, going up 11 days and then moves sideways for six days holding well above the previous consolidation of late October. This is very bullish, and the low volatility shown is, also, bullish.

At this point, the maximum correction down has been seven days, and the first was a five day correction. The next correction, on 11/26, is only two days down with another rising bottom, which is again bullish. Notice the space between the low and the previous high, followed by a move above the previous high. The next correction down is two days into 12/3/85, leaving still another rising bottom.

Price could be accelerating, and, if so, corrections will only be two to three days. If blowing off occurs, corrections would be only one day. The next correction is two days of sideways movement and then price moves up strongly. On 12/12, there is a one day correction, and then a two day correction into 12/18, and finally a three day into 12/26. Price moves up for seven days and then another three day move down. The next move is up seven days, with a reversal day on January 8th. There is a loss of upward momentum, at that time, which you can see by simply drawing a trendline from the three previous highs. This indicates the possible start of a correction or consolidation. The three day correction down is normal, but then two days up stops the move, and price moves down for seven days into January 23rd. We know the next time period for a countertrend move is seven to eleven days.

In the move down little damage was done and the correction ends on the 7th day, which was, also, the longest of the corrections in the drive up. In addition, it was within a point of the largest previous correction. Price moves up for two days and leaves, yet, another rising bottom. There is a one day move down on January 30th, and another one day move down on February 5th, leaving a double bottom consolidation. Now there is a gap move up, and the move lasts for 7 days looking very strong into a two to three day correction on February 20th, 1986. This is a normal correction again, and the stock looks to be accelerating. Again, price moves up until there is another three day correction into March 11th, and then three days up, fails to take out the previous swing high. This indicates a possible correction or consolidation. This takes the same form as the previous bullish consolidations and from the one day correction on March 21st, another fast move starts, which again gives a two day correction into April 2nd.

The next day is up, the following down, and this continues for five down days, which is still within the normal pattern of consolidation. On April 8th, there is a wide range gap move up to new highs followed by another gap move. No correction results, just a sideways pattern as happened on December 6th, 1985, and is very bullish. A big blowoff move follows- eleven days straight up.

Notice the top in early July, 1986 had a 45 day blowoff move up into the 90 day cycle and the 270 day cycle.

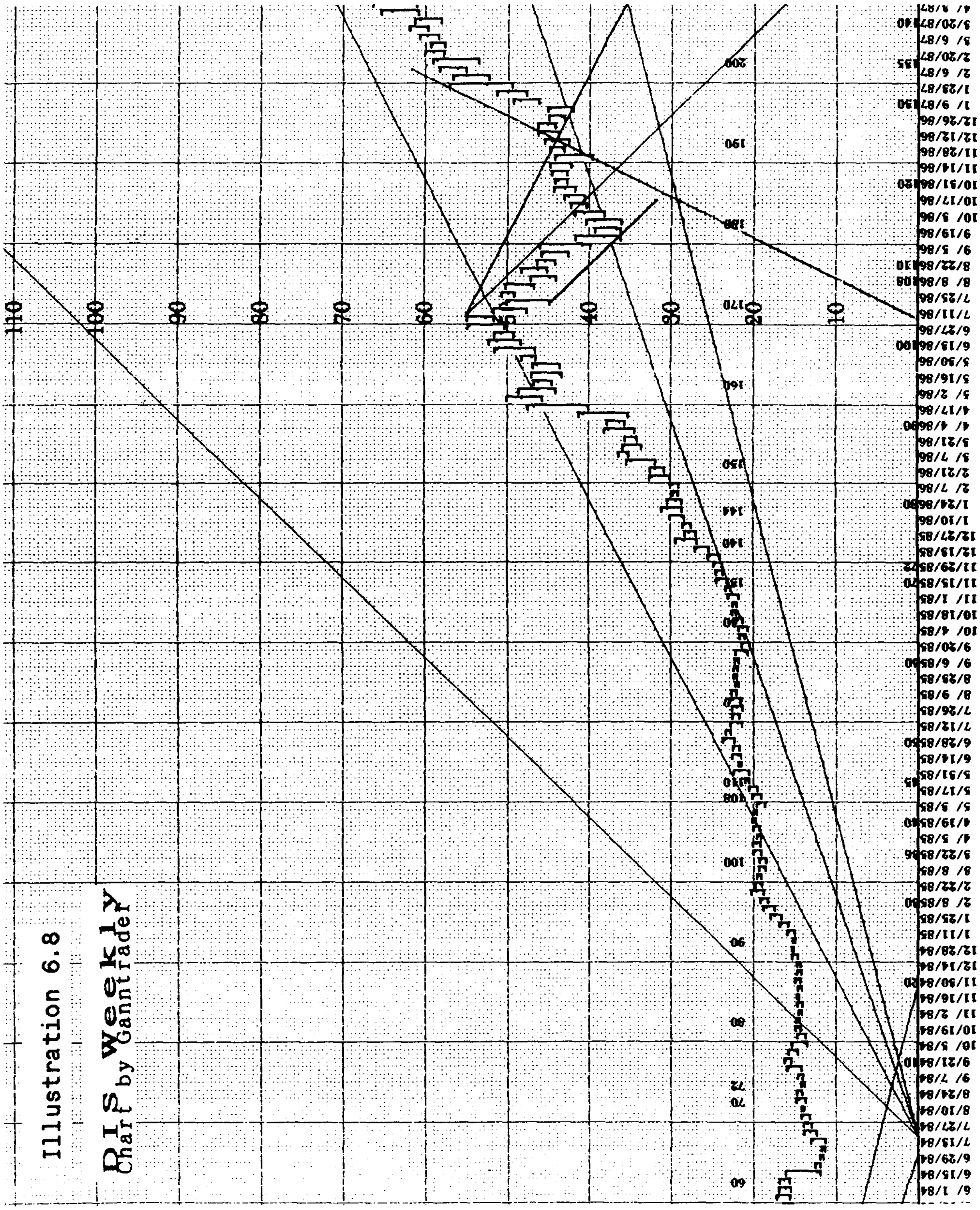

Illustration 6.8

Now let's look at the move down in the same perspective. Price moves down for 5 days- into July 8th- followed by a two day rally, then three down and up five days, sideways three days, below the level of the July 10th high, falling within the 7 to 11 day probability of being a countertrend move. After the small distribution pattern, there was a big break in price and a two day rally, then seven days down into August 8th. Notice that this is nearly the opposite of the move up. Two days up against the trend creates another lower high, and just as we see rising bottoms on the way up we are now seeing lower tops on the way down. Remember that fast moves come from the 3rd or 4th lower high, and on September 2nd a two day rally against the trend terminates, leaving the 4th lower high. Next, five days of price moving down, and then a one day correction on the 9th of September, indicates another blow off move or acceleration in progress.

Now, how far in time from the Gann cycles could you assume this move would last? Thirteen weeks or 90 days is always a good possibility considering the cycles that brought in the high. Since this is obviously an acceleration, you can use the 7 week or 45 day death zone from the 8/12/86 high. All these assumptions as to the move down work out nicely due to the termination phase being one year from the previous lows of 9/16/85 to 10/1/85, or the lows from which this movement started.

How long would any rally last from this perceived low? The first probability is 30 days. How far up in price? The chart shows resistance at 44 to 45, which are the lows of the topping pattern the stock broke down from. The next time objective is 45 days, which could be 49 to 52 if an acceleration in price movement upwards is shown, then 60 to 62 days, and 78 to 90 days. But to help determine which cycle will end the move, it is helpful to understand the price movement and to read the charts. Noting corrections, strength of moves, and time, is very important. You, also, have the weekly and monthly charts to give even better evidence from angles and long cycle turning points. Even without those angles, charts, and cycles, repeating this type of exercise, along with other daily charts, plus viewing the time of correction and advances, and swing highs and lows, is exceptionally valuable to any technical trader.

Now use the Disney weekly chart (Illustration 6.8). Notice the week of 6/27/86 is 52 weeks from a high, and that the week of 7/4/86 is 104 weeks from a low. So, there are two yearly cycles coming out in this time period. Also, at this time, there was a 13 week cycle from the start of the acceleration, and price was seven weeks up from the last low to terminate the longer cycles. On the monthly chart, you can see that June of 1981 was high, making June of 1986 a five year cycle from high. So, a one year cycle from high is present, price moves up into it, also blowing off a five year cycle from high, and the low of June, 1977, is 108 months or 9 years. Nine years, two years, one year, 270 days from low, 90 days from the start of an acceleration, and a 45 day move up into the high price, are all expiring cycles. With this type of evidence, you might have expected a 90 day move down, at a minimum.

One valid technique which works with fast moving stocks and commodities, is to draw a 45 degree angle down from the first swing low in a down trend such as this, and to anticipate support on that angle. If you draw that angle down from the 7/18/86 low, you will see that it intersects price on the week of 9/19/86 on the weekly chart.

The 45 degree angle from the high crosses the level of the 5/16/86 low during the week of 10/3/86, squaring that range. If you had been short this stock for this move, you would have been looking for a low at 90 days, or 13 weeks from high, or, possibly, 11 weeks or 78 3/4 days. Price found support on the weekly chart for three weeks at 36. That should have been sufficient evidence to indicate that the eleven week cycle was the effective one from high to low.

Now look at the monthly chart- specifically 2/27/76 (Illustration 6.9). One of the rules we work with is, the first time price moves to fifty percent of the high price, when it takes years for the stock to accomplish this move up from a low level, it is a very high probability short trade. Price moves up for six months, or 180 days, and a three month or 90 day move, caps the six month move into that resistance zone. Remember, time is the most important part of this analysis, and look at all charts with that in mind. The move up to the resistance zone ends with a trend change, and price moves down for one year.

In looking at the longer term cycles on the Disney monthly chart, we have seen that the five year period is a valid time to look for change, if price moves in the right fashion into that time frame. All of these cycles can work from low to high, or high to low, or high to high, etcetera. So, in January of 1978, when price was sixty months or five years from a high, there was probability that the down move was over.

The low in 1975 was 24 months from high, and the last high in the stock was 24 months from low. These cycles repeat with stocks, and the market (see July for repetition of cycles on the Value Line weekly). Gann said that this repetition can be forecast with the use of the spiral charts or the Square of 9, and the hexagon chart.

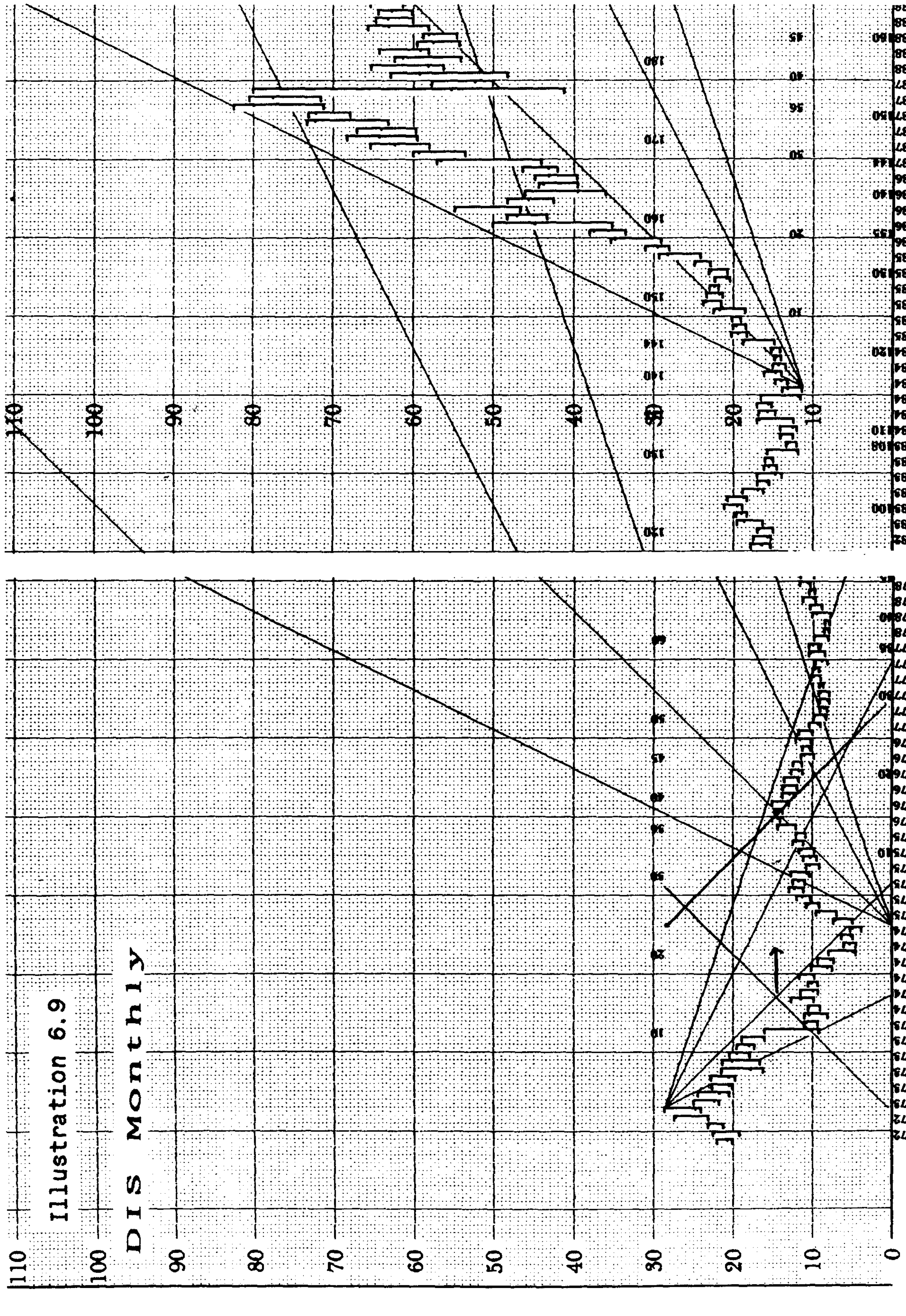
Illustration 6.9
DIS Monthly

GENERAL DYNAMICS

On the General Dynamics weekly chart (Illustrations 7.0 & 7.1), July 23, 1982, is the first square of the low of March 12, 1982. If you look at the 45 degree angle down, or the 1X1 angle from the May 7th top, you will see that it squares the range of movement in the same week. Now, at this time, July 23rd, you can look at the chart and say that the trend is probably changing to up because price broke a triple bottom to make the low in March, and then drove up, recovering that price of the previous bottom. This is a good sign of strength. The move down, before this bottom, was 52 weeks or 12 months in length into December of 1981. Then support was shown for three months with the break and recovery of that support at 22 coming three months later in March of 1982.

So, this stock might have a bottom coming in at this time, and in July, price squares a range and the low in weeks. Price has been moving up for seven weeks since the previous bottom, and from the bottom in March, price moved up for seven weeks, as well. Therefore, with the squares coming out, the assumption is that price will change trend for the normal correction against an up move on the weekly chart- three weeks. Now, this would be something of a high risk trade because of the consideration that this stock may well be, at this time, an up move, but you could play the trade in any event.

Being against the trend, this is a high risk trade. If you were playing options on the stock, you would want to purchase an "in the money" put in order to effectively stop yourself out with a small loss, if the trade went against you. Of course, you would go to your daily chart to look for a daily turning point within that week for a high. You would either take the trade on that day, or see if you get the reaction you were expecting and then, take the trade.

During the second week of this trade, you would have to consider where fifty percent of the range of movement, from the March low to the July high, was in price. Figure that price by subtracting the high from the low, dividing by two, and then adding it to the low price. You could use that price level to get out of the trade.

Now you have your short position and know where to get out. However, you think the stock is in an up trend because of the obvious bottoming action, and on the third week, price does show support at fifty percent of the range. You should be out, but this third week is, also, against an angle coming up from the low, a 1X4 angle, which shouldn't be extremely strong support. But, time is 22 weeks from the bottom, and one week short of 90 weeks from the top, and this is a slow moving stock, at this point in time. Therefore, the slow moving angles are important. If this is going to be a good move up in stock, that support at fifty percent of the range is critical, and if it is shown, it is a good reason to consider long positions.

The second square of the low comes on the week of December

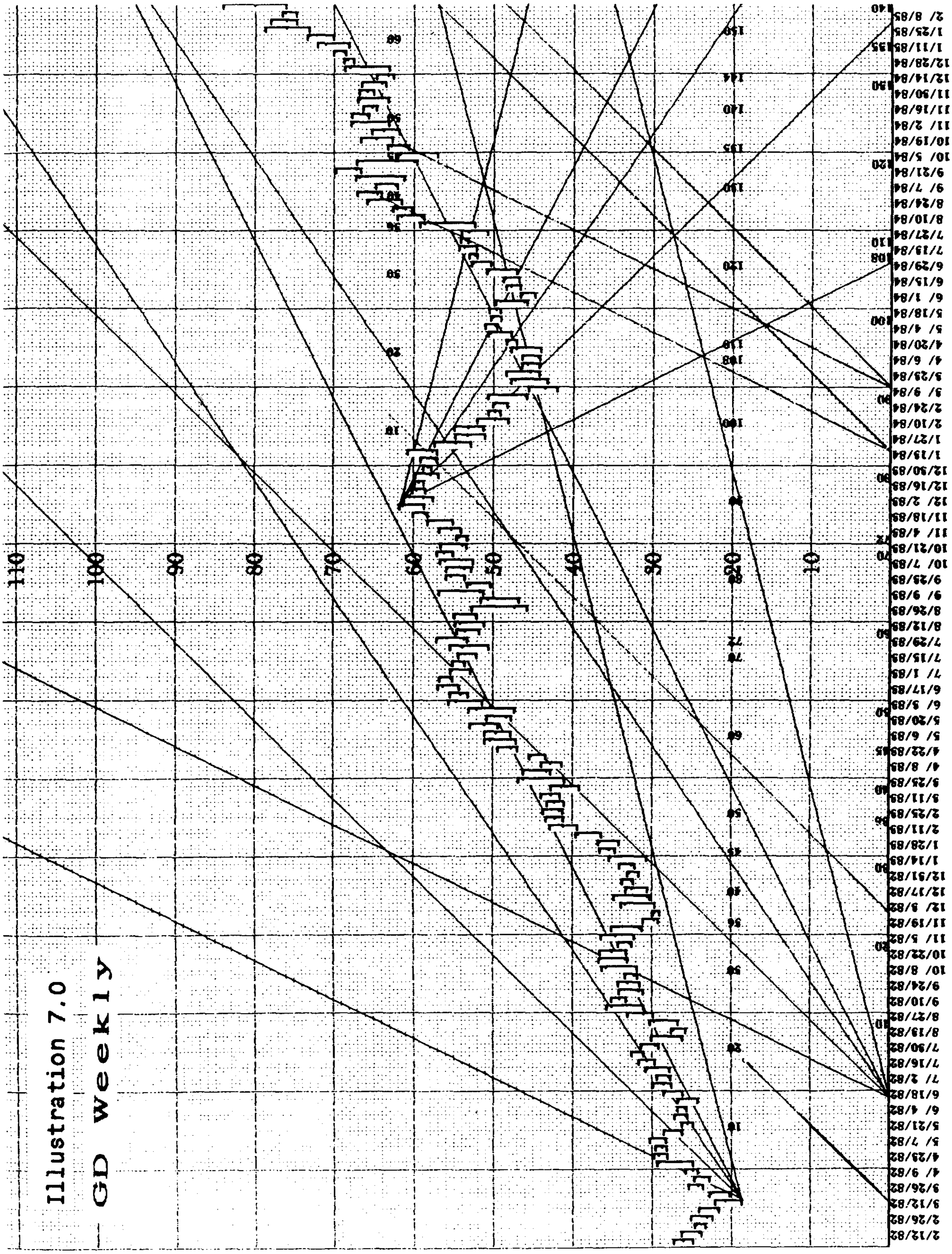
Illustration 7.0
GD Weekly
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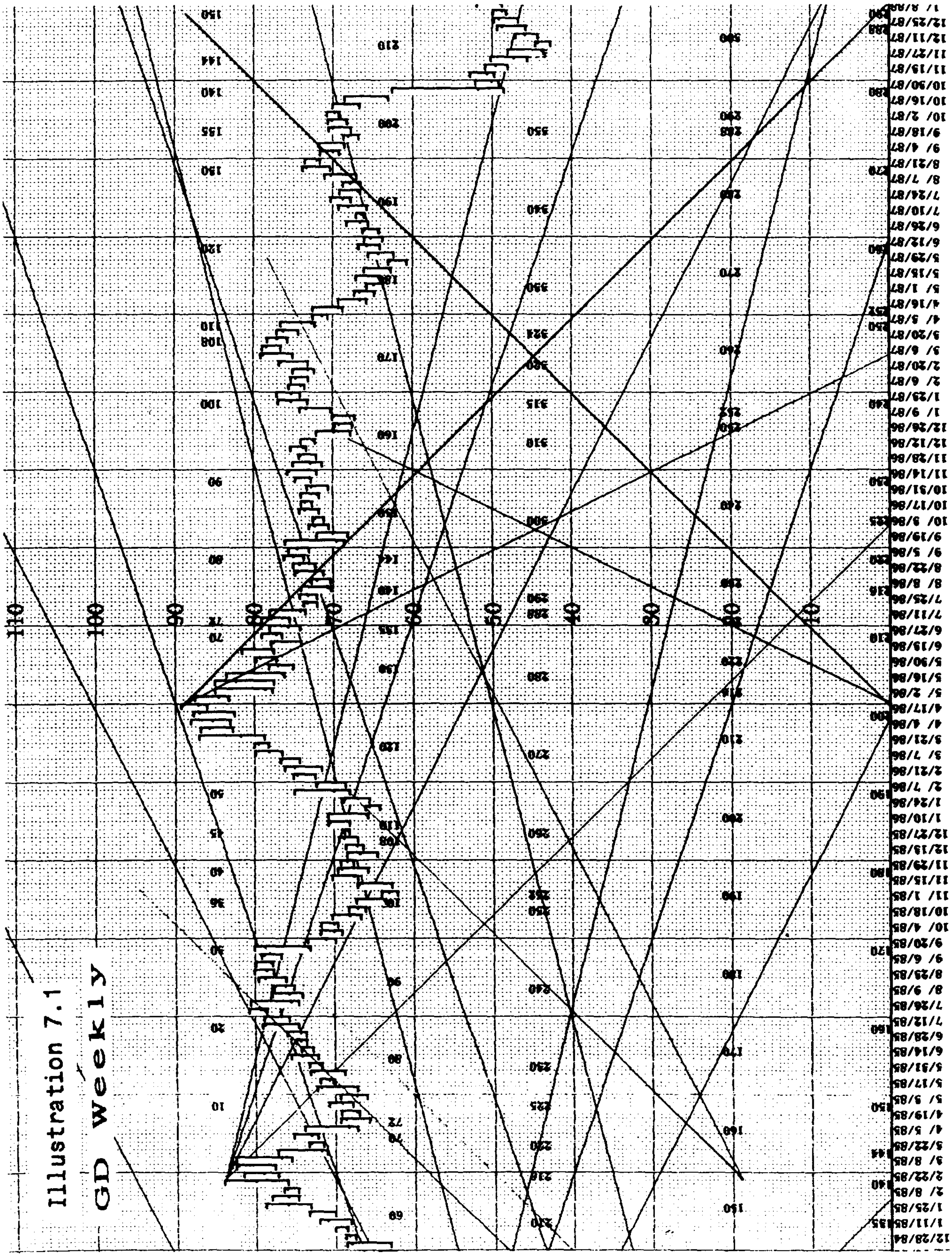

Illustration 7.1 GD Weekly

3rd, and a second higher bottom from the week of August 13th. The square of the low price made in the week of June 11th, gives the week of November 26th. During this week, price is in the third week down from the November 5th top, and is two years from that previous swing high in 1980. This gives the third higher bottom in the price of the stock, and in the first week of January, 1983, the stock spikes down into the 45 degree angle drawn up from zero and the date of the June low, and shows support on that angle for a forth higher bottom. Now, Gann said to use the first higher low or first lower high to judge a cycle because what you may be looking at is the primary low or high at the end of the last cycle. The start of the new cycle may be from the higher low or lower high. I tend to look at both for evidence.

So, with this in mind, notice the high on the week of 11/25/83. This high is followed by some sideways movement, then a reversal week on 1/13/84, which is a very weak price movement. You would use counts from that week, also. It is a good place to count from, and a good place to draw angles from, because it could be the start of a new down cycle.

Follow the 45 degree angle down from the November high, and whenever it hits the level of a previous swing low, it squares the range of that high to that low, and can be considered a possible turning point. So, when that angle squares with the low of 45 1/2 in the week of 3/23/84, it could have been considered a turning point. You might have gone short. You wouldn't have made any money, and after the third week of sideways price action, you would have to say, "I must be wrong because I'm not getting a fast move, and that is what I am looking for with this technique." If you don't get a fast move, get out and walk away.

The reasons you wouldn't have taken this trade are numerous. First of all, price was not up for three weeks, a normal correction against a bear trend. Secondly, the 2X1 angle down from the lower high, which price had shown resistance at in February, and had broken to the up side, and then recovered in early March, had been broken completely. This indicated the end of the down move- at least temporarily. Finally, the low week that fell below that 2X1 angle down was 104 weeks from the March, 1982 low in the stock, and that is an excellent yearly cycle working out.

On the week of 11/26/82, the 45 degree angle up from the 6/11/82 bottom squares with the price of that low, which indicates that this could be a valid angle to work with. Now, price moves sideways into that angle and touches it on the week of 1/14/83. This is not a clear setup, so you would probably not trade based on this angle alone. But, if you look at the chart and count the bottoms that are higher, you will see that the low was in March was zero, the low in June was one (don't count it unless it is a low for three weeks, three days, or three months),
the low in August is number two, and the low in November is three. We know that a fast move will usually start from the third or forth higher bottom. When the 45 degree angle up actually came into play, it was the fourth higher bottom, and price gave an outside

reversal week up. This is a very bullish indication. At the time hit that angle, I would not want to buy. I would be looking for evidence that the angle was effective, and the outside reversal week up is the type of evidence that I am looking for.

On the monthly General Dynamics chart (Illustration 7.2), when the 45 degree angle down from the November, 1980 top reaches the price level of the February, 1978 low, a square of a minor range is shown, and although price has moved out of that range, it is still an important time. That square of range comes in, in time, January of 1984. November of 1983 was three years from the same top that is squaring out in range.

In fact, if you will count out from that high in weeks- for three years, or 156 weeks, you will get the date of the high week in this stock on the weekly chart. That high is, also, 52 weeks from the 11/26/82 low, and 13 weeks from the 8/26/83 low. The next week from that high in 11/25/83 is 90 weeks from the low in March of 1982. That is good evidence, and price moves sideways from that high. The monthly turning point is in January, from the squaring of the range, but this is still a good place in time to look for a short position for an 11 to 13 week drive down.

From the date of the 11/26/82 low, the 45 degree angle up from zero is broken in the first two weeks in January of 1984. One of the rules that Gann laid out was, when price breaks a 45 degree angle up from zero at a high price level, it means that the trend is changing. This is not to say that the trend from this point is down, it is just evidence for a sell- an indication. Of course, this indication combined with the anniversary dates, a possible lower high, and the monthly turning point, is an excellent indication.

The next turning point we want to look at- on the monthly chart- is the 45 degree angle up from the March, 1982 low, crossing the level of the November, 1980 high. This happens in the month of May or June, 1984. From the square of the range of this low, to the high at 42 in January of 1980, we have March of 1984, and to the next high, we have the month of May or June, again. In March of 1984, support is shown at an old high of 42, and by June, price had gone above the level of another old high at, nearly 45, and broke the 2X1 angle down from the main high in November of 1983, indicating that the correction down was over.

Again, on the monthly chart, the 45 degree angle up from the low in March of 1984 crosses the level of the November, 1983 high in October of 1985. That is a good square of a range, from angles that have proven support. Moving to the weekly chart for that same October time period, we find that the full range from the high in the week of 7/19/85 squares with the low of the week of 4/12/85 in the week of 11/1/85. This is, also, the tenth square of the low from the week of 3/12/82. This is all good evidence to look for a change, and you might take a high risk, long position during that week. But, from the weekly chart, before you could be certain that the down move was over, the 2X1 angle down from the 9/13/85 high, the start of the fast move would have to be broken. Price does

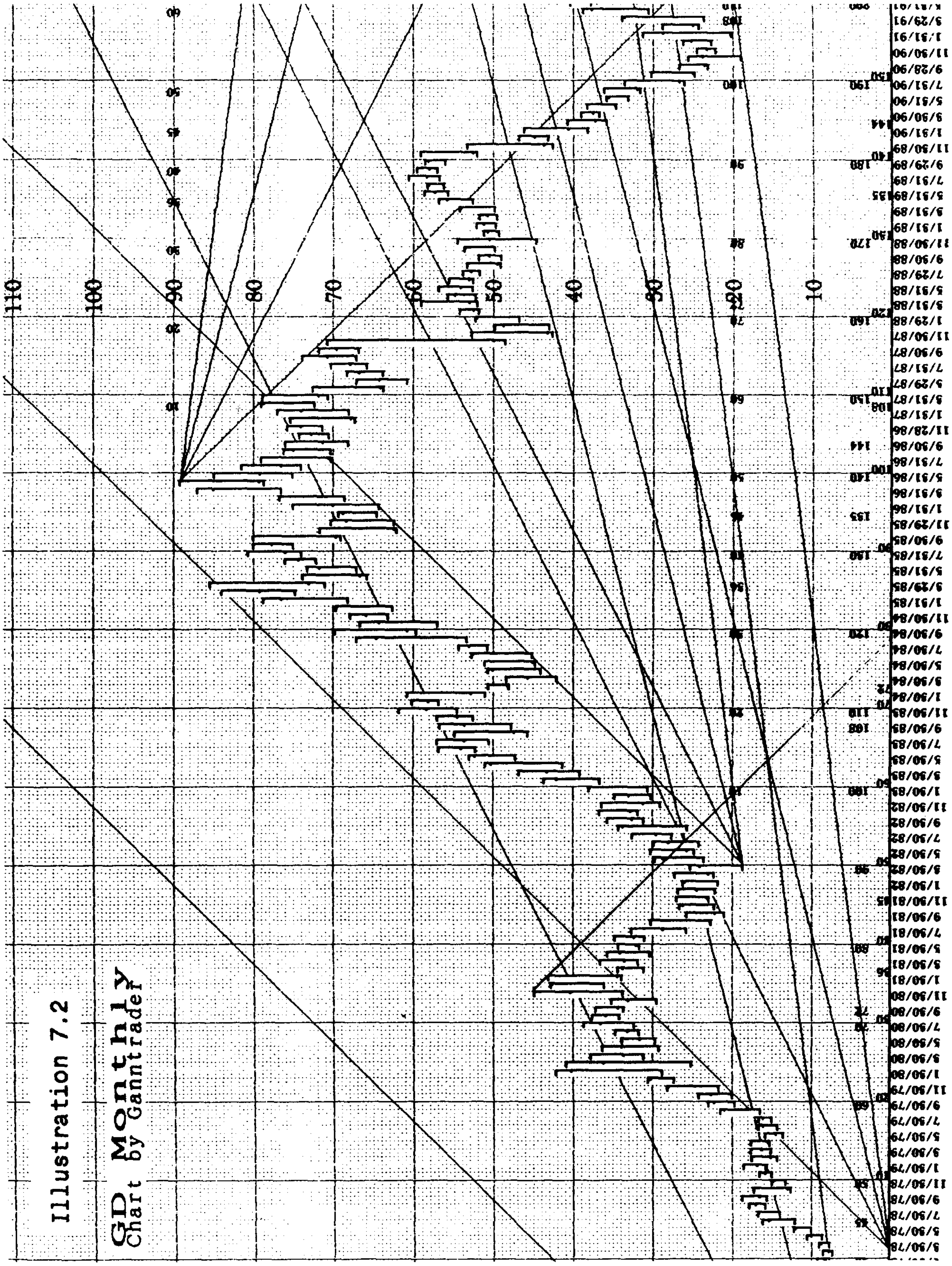
Illustration 7.2
GD Monthly
Chart by Ganntrader
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break this angle during the next week, and, having that confidence, you would now be seriously looking for long positions in the stock. The next resistance from angles is the 45 degree angle from that same September high, and that is encountered late in the month of October.

By this time, you are probably getting frustrated by taking long positions from the weekly chart and not getting results, so look at the monthly chart, again. In the month of December, the 2X1 angle down from the top is broken. Now, on a monthly basis, the corrective move down is over. So, you are again looking to position long in this stock, and you know that you have good support from a proven angle, which in January is at the 64 to 65 price level on the monthly chart. That is where you want to buy.

Let's go back to the weekly chart. In January, a small range from the consolidation is working out in the week of 1/17/86. That is the range of the high, in 11/15/85, to the low of the 11/1/85 week. In, and of itself, this is enough evidence to look for change. However, time, also, is 11 weeks from that low, and 26 weeks, or 1/2 year from the July 19th high. There is some accumulated evidence indicating this week, including the fact that the 45 degree angle down from the start of the fast move down has been recovered. In addition, time is three years from the 1984 high, and the stock is in a strong position from top.

During the week of January 10th, price spikes down, closing low, and very near the support angle on the monthly chart. The next week, price is at that support angle, and there is evidence for change. The major resistance for a move up from the angles down from top has been overcome, and price is at the buy area. Go ahead. Make the trade, and remember that you are looking for a minimum three week move up, and even a possible a three month move up.

Of course, now that you have made the trading decision, you should use the daily chart for timing the entry and exit of the position. (Illustration 7.3 & 7.4)

The move up, which occurs from the week of 1/17/86, gives the look of an acceleration, with corrections being small in time. The first correction is three days down, the next is one day (on a thirty day cycle), etcetera. The corrective moves, in both time and price, get smaller and smaller as price moves up. When you see this, you can assume a 90 days calendar move. The move will often end on the 90th, and no later than the 99th calendar day from the start of the move. By the 90th day, you can see that price is starting to give a bit of sideways action, and price is trading below the 2X1 angle up.

Now the consideration is that the move up may be ending, and you are looking to get out of any long position and possibly go short the stock. Time is six months from bottom, and one year from the previous bottom, and there has been a fast three month move up. Often the way these cycles terminate, such as a one year cycle, is in a 49 to 52 day blow off from a swing low. This is Gann's seven week death zone, and it applies to fast moves.

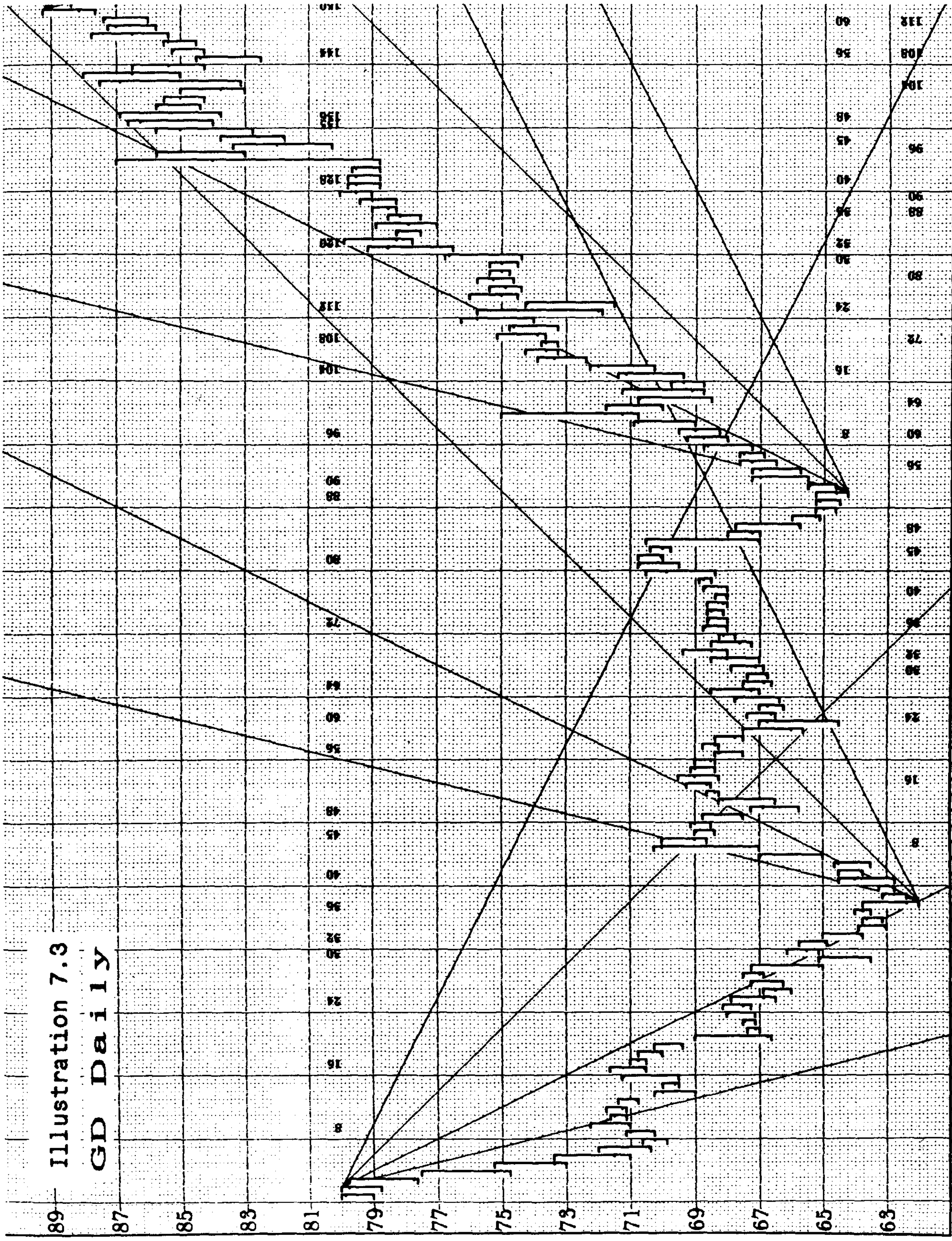

Illustration 7.3
GD Daily

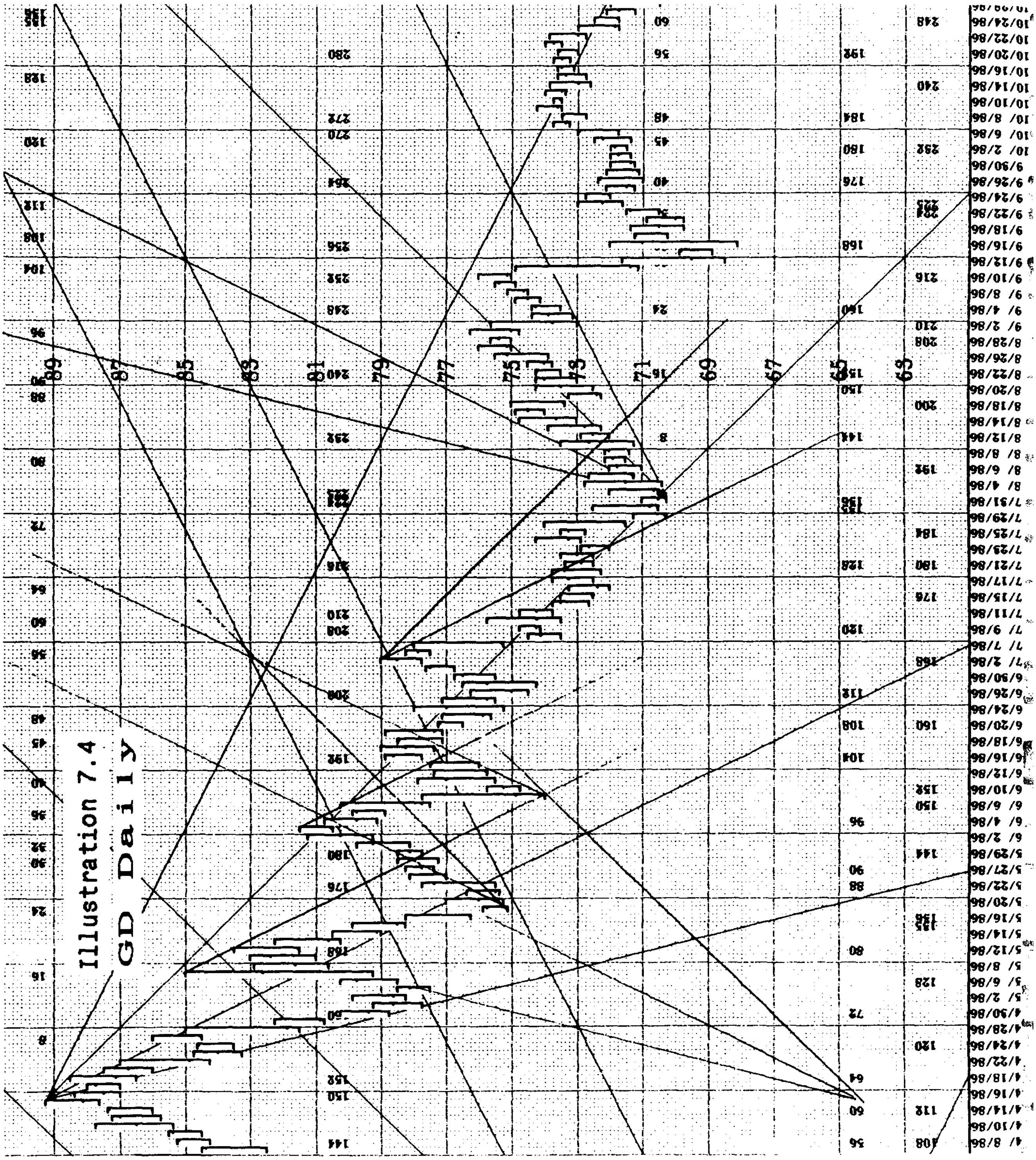
Illustration 7.4
GD Daily

On the daily chart, you should be looking for that 90th day, and take the last low before that day, and draw a fast angle up from that low. I use a 4X1, or a 2X1, depending upon the scale of the chart, and I look for price to break that angle on, or just after, the 90th calendar day. The reason for this is, if price is going to have a blow off move from this acceleration, that angle will provide support for the blow off move. When the blow off is over, the support angle will be broken and price will pass through it. If I took a trade from the break of that angle, I might be looking for 11 trading days down to take my profit, depending on the price action.

On the weekly chart, in the 13th week from where the move up started, 4/18/86, price has been moving sideways for three weeks, just above the level of the old top. The week before this week, price moved through the 2X1 angle up from that January start of the fast move up, and did not recover it.

That is the way a 90 day price acceleration happens, and you will see this type of move often when the market is moving quickly. It will happen in both up and down moves in price.

Now, before we leave General Dynamics, I would like to point out a situation on the daily chart. You will see this setup on the daily charts, and if you are a trader, and you don't mind taking high risk trades from daily charts. You might consider this a trading opportunity. The 45 degree angle down from top is broken to the upside on June 3rd, 1986. Then price reverses down through that angle and closes below it. Again, this is a higher risk type of trading, but you can short the stock or buy puts on this type of move. Use protective stops!

You can see a very similar type of situation on the 2X1 angle down from the high on the date of April 25th, 1986. These are trades that should be taken in fast moving stocks and markets only. The breaking and recovery of support and resistance angles is an indication that you can go with the direction of movement. Keep your stops tight. Remember when you are considering one of these trades, to make certain you do not trade solely upon the angle break and recovery. Look to see where support and resistance are on the weekly and monthly charts. Check the amount of time that has passed since the beginning of the move. Is it 30, 45, 60, or 90 days? Look for a loss of momentum either to the upside or downside. Filtering these trades can keep you out of a lot of bad ones.

Notice, the monthly chart, March, 1987, was sixty months and sixty points. When price moves back up into a conjuction of 45 degree angles, as occurred in this instance, it was refered to by Gann as a Death Zone.

GENERAL MOTORS

Look at the GM weekly chart (Illustrations 7.5 & 7.6). Running across the top of the chart starting with the week of January 23rd, 1981, are the counts from the square of the 1965 high price in time, or simply put, the last significant high price at 113 3/4, in this case multiplied by 7, the seventh square of the high counted out in weeks. The next square is the eighth, and so on. Using this counting method is the equivalent of drawing a 1X1 or 45 degree angle down from the high price until it reaches zero, and then taking it from that first square and drawing the 45 degree angle back up to reach the high price for the second square of the high in time, and so on, until you have arrived at the dates indicated. So, you can count it out, as was done on this chart, or, you can use the geometry of the chart to calculate these multiples of the square by drawing the angles.

Fifty percent of that high price, which was 113 3/4, would be 56 to 57, and, if price is below that level of resistance, presents an exceptional price level to look for support.

So, on the week of January 23rd, 1981, you would be considering that GM, on the weekly chart, has moved into a stronger position from top because it is above the 1X1 or 45 degree angle down from the September high. That is bullish. Time is at the 7th square (in weeks) of the most recent significant high price which is a place to look for a change in trend, and price is down for three weeks into this weekly turning point. Time, also, squares out the April 25th low of 39 1/2, on the week of January 30th. This can be found by counting out that 39 1/2 price in weeks from the date of the price, or by drawing the 45 degree or 1X1 angle up from zero, starting on the date of the low. When it crosses the price level of the low, you have the square. This angle could, then, be bounced up and down to find multiples of that square. Additional evidence from the cycle of years and price action would be from the fact that the last drive down in the stock lasted for 13 weeks, and produced a double bottom, and, of course, the square of that low at 39 1/2 comes out during the 39th week from the low, or 270 calendar days. It is a doubly good time to look for change.

On the same week of January 30th, the 45 degree angle from the top in September hits that low price level, squaring out the range between the September high and the April low. At this point in time, you would say to yourself, "What would this chart look like in the future, if this is to be the bottom and price moves up from this period?" If the turning point is a bottom, then the chart would show a higher bottom, or a rising bottom after a double bottom, and that is quite a bullish indication.

Next, you would go to the monthly chart (Illustration 7.7). Notice, the December, 1980 low came in on 48 months from a top, 4 years (a yearly cycle), as well as, 72 months from a bottom, 6 years (a yearly cycle). In addition, price shows a near double bottom in December, with the low found in April of 1980, which was

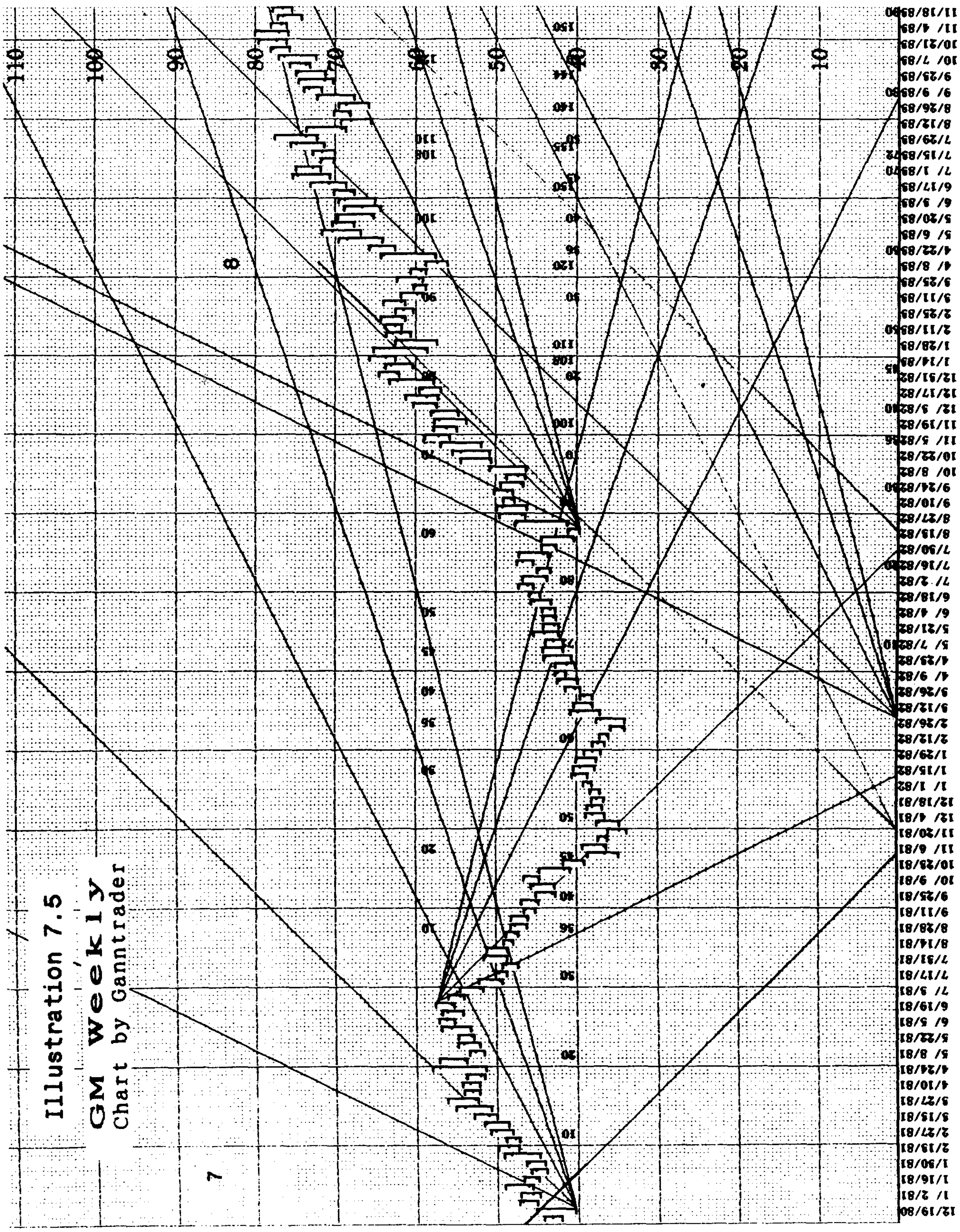
Illustration 7.5
GM Weekly
Chart by Ganntrader

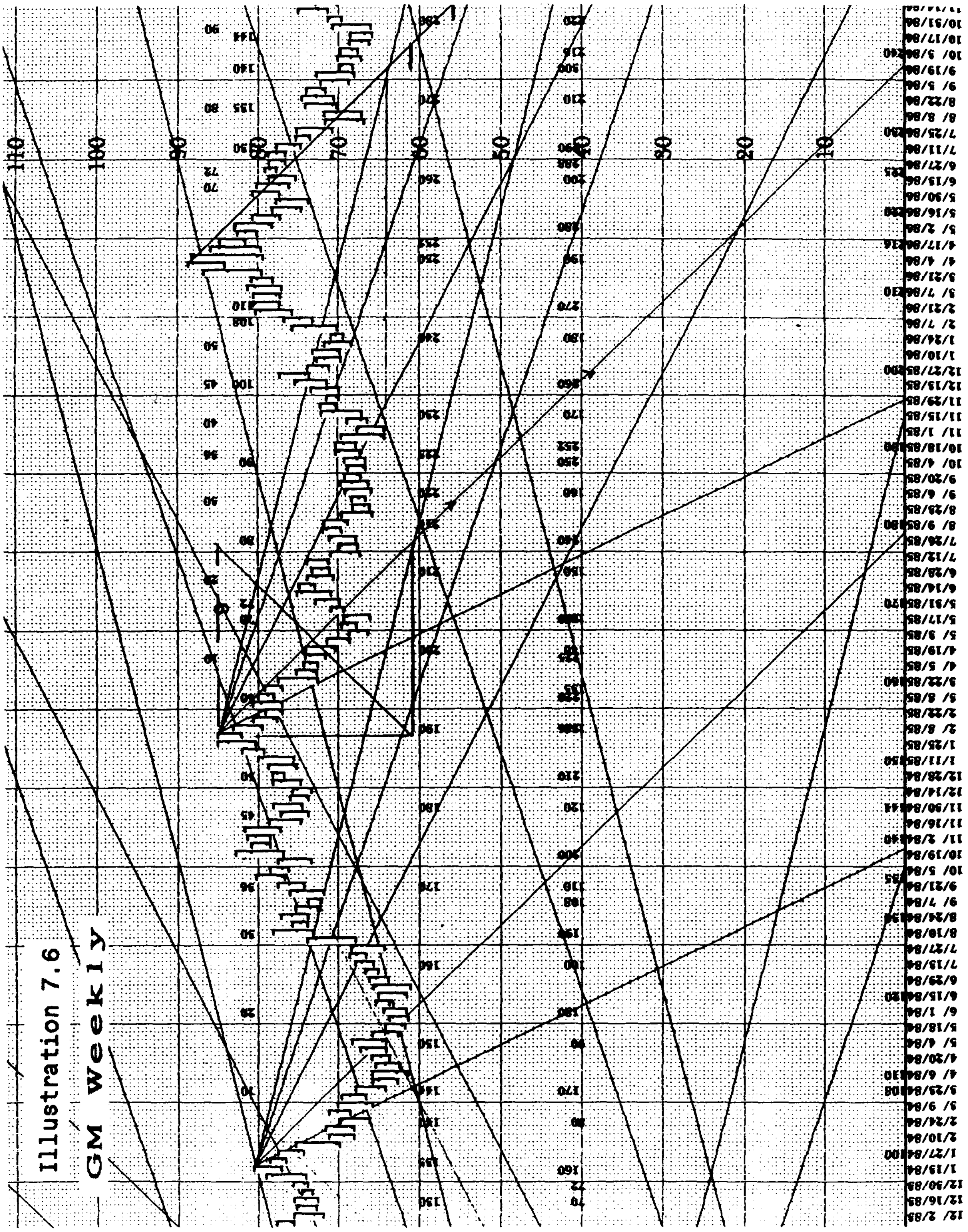

Illustration 7.6
GM Weekly

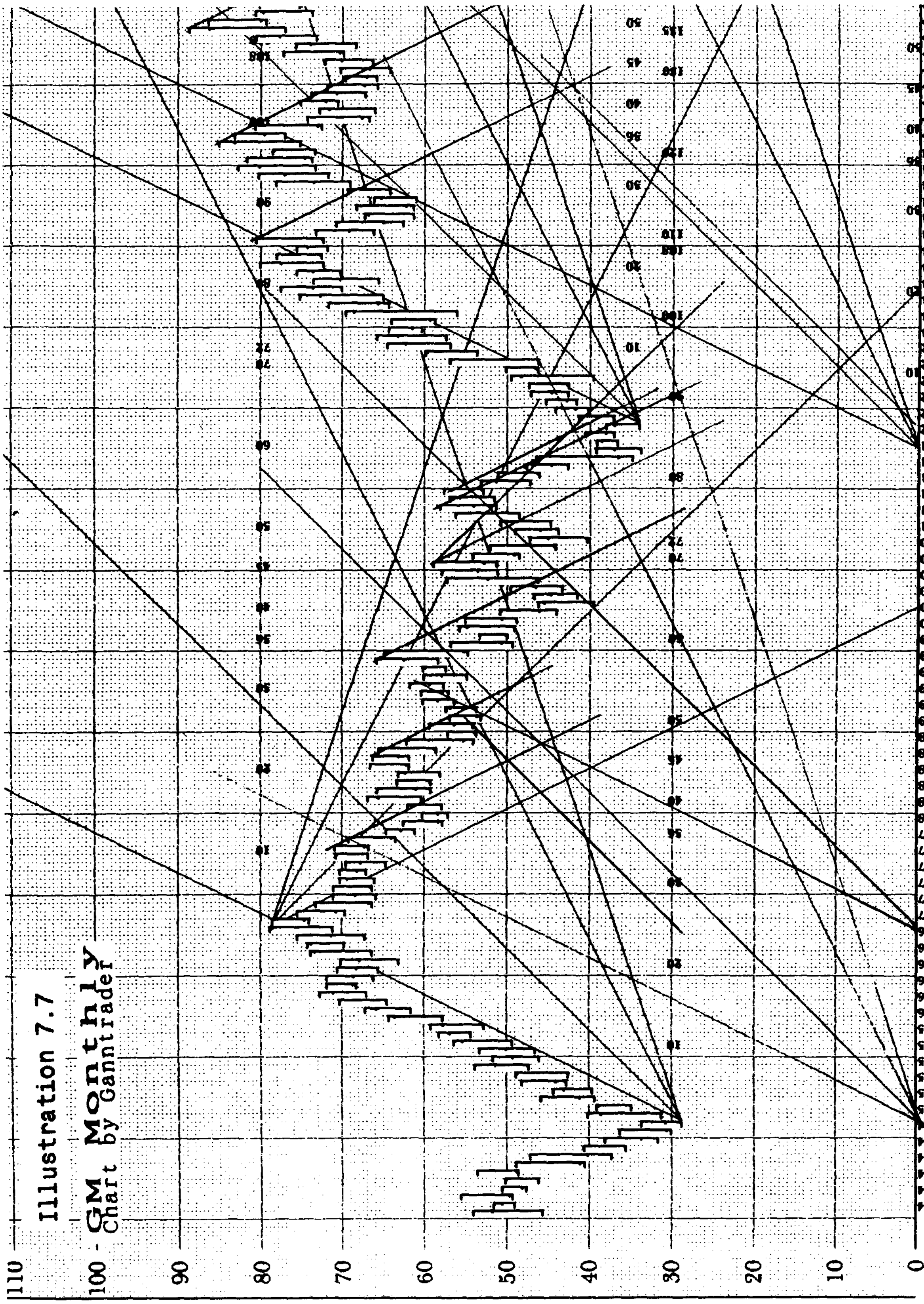

Illustration 7.7

fifty percent of the December, 1976 high in both, price and time. So, the December bottom is, also, very near this fifty percent of the high support level, and showing increased support.

You would know to look for resistance at the 2X1 angle moving down from the September top on the monthly chart. A move above that angle would likely give us an acceleration in price up to the old top of 59. Of course, given we can see the price now, it is obvious it only made it up to 58 in this instance, but still a nice move. If you remembered the square of the high, the 50 percent mark is at 56 to 57, so you could consider that to be the target price.

Now let's move to a later time period with GM. Again, look at the weekly chart. I have drawn two squares of ranges on the chart, but notice the 45 degree angle moving up from the 11/1/85 bottom. When this angle hits the February, 1985 price of 85, the range is squared from low to high. That price level was within two points of three times the 1974 low of 29, the significant low on the monthly chart. From the December 20, 1985 high, the 45 degree angle down crosses the level of the low at 64 in nearly the same time frame. The 45 degree angle up from the January 17, 1986 low crosses the level of the December high, again, in the same week. There is very little in the way of confirmation from the cycles of years on the weekly chart, in this instance, but the ranges squaring is good evidence that a change could occur.

If you will look at the same time period on the daily chart, you will see that price is in an accelerated move up that week. (Illustrations 7.8 & 7.9) One of the high probability methods of determining when an acceleration up will end, is to look for the first day price closes, below the 4X1 or fast rising angle, which in this case comes from the 3/14/86 low on the daily chart and supports price movement up until the day after the top. That day, the 31st, price breaks the angle, and the assumption is that the acceleration is over.

When you see a spike move up, like this, followed by a spike down, the ideal setup would be to go short the stock or to buy puts, on a lower top. So, what do we know that would give us a lower top? First, we know the typical move against trend is three days, with a change in direction on the forth day. In GM's case, on the daily chart, we are looking for three days of price rising, which is followed by a fourth day with price beginning to fall again. If we get this, and show a lower top, then we have a good indication that the trend is down, and a good time to short.

Now, here is something new to add to your "tool kit." A move that is symmetrical, or follows a 4X1 angle up, and then a 4X1 angle down, will yield a high probability of an excellent turning point (in this case a day), when that 4X1 angle down hits the price level of where the original 4X1 angle started from. This is the triangle on the daily chart.

This triangle gives us a timing day which is apparently the 14th, although this may not be exact. The division of the square of the range on the 4X1 angle from the high, to the low of the 4th.

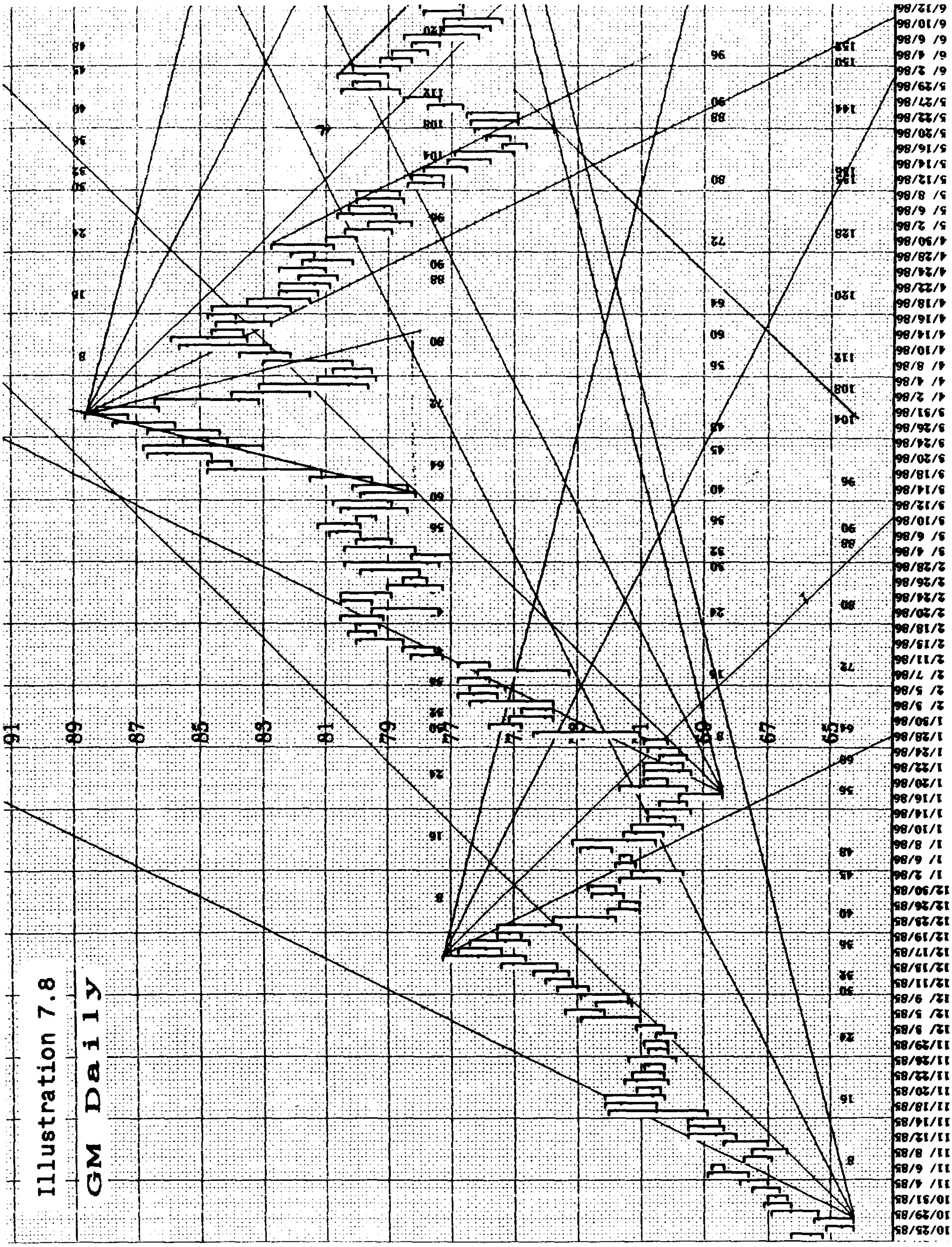

Illustration 7.8
GM Daily

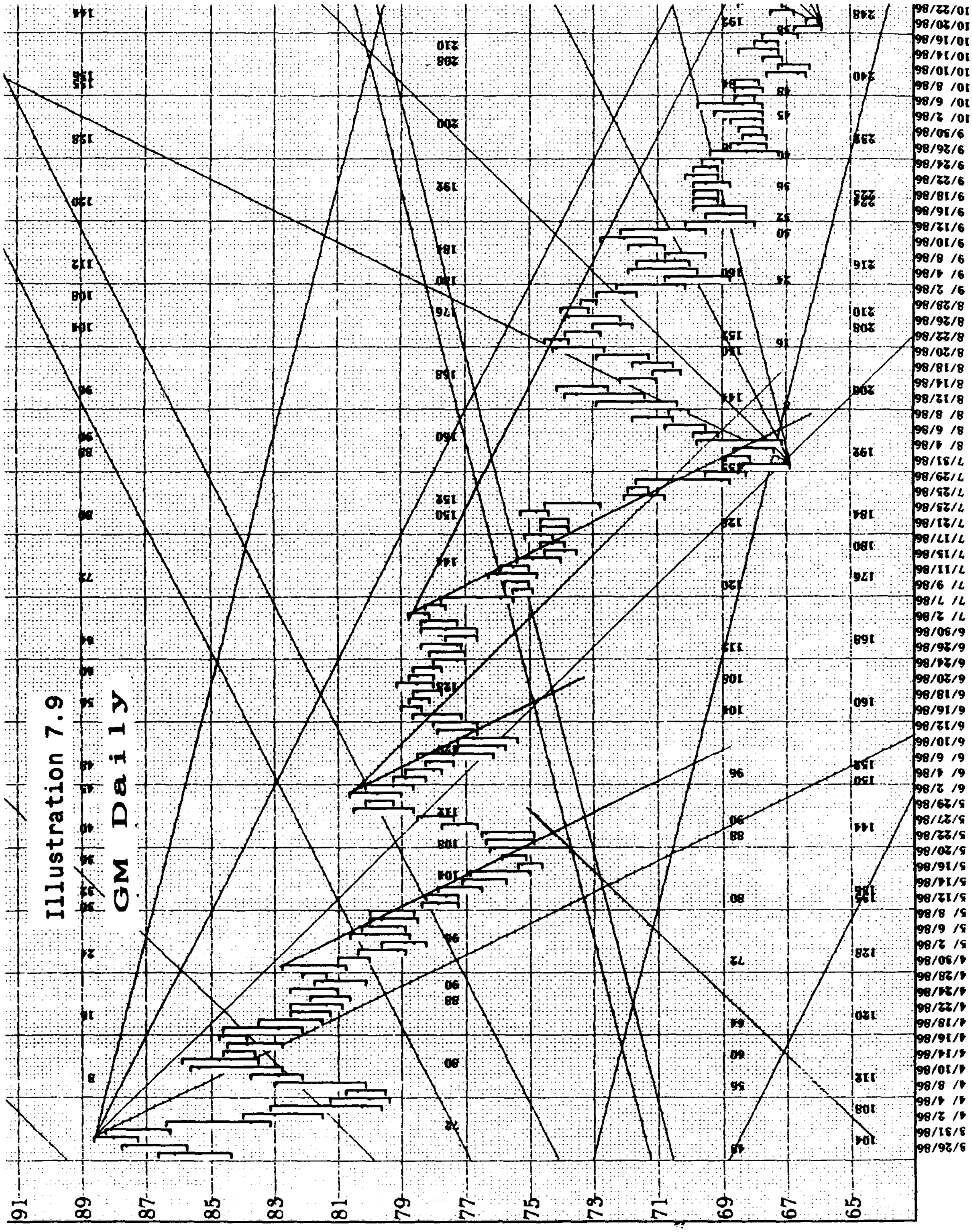

Illustration 7.9
GM Daily

This, obviously, is showing the 11th, as is the three day move mentioned above. On or about the 15th, we have a 90 calendar day count from bottom, with a drive up into it, and a 120 calendar day count from the previous high, so, we know we have a natural cyclical turn. This is a high probability setup.

As I mentioned earlier, it is important that you recognize common chart patterns. Look at the General Motors monthly chart. The head and shoulders pattern, at the 1976 top, has a distance in price from the head to the neckline, at 15. That gives an objective after a break of the neckline of 15 points down from the neckline at 64, or a price of 49. Edward's and McGee's book on general chart patterns is excellent for this type of study and familiarize yourself with normal market patterns. These patterns will show up on all charts- daily, weekly, and monthly. Obviously, the monthly patterns have the greatest significance, and the daily patterns, the least.

To find fifty percent of the range from the December, 1974 low to the high in December of 1976, follow the 45 degree angle up from the price level of the 1974 low from the same date as the high. When that angle crosses the 1X1 down from top, you have fifty percent of the range in price and in time. If you draw that line, you will see that price came down to that time and that price level, and proved support for a move up.

Gann called this angle up from the level of the previous low the "relative true trend line." He said that "once this angle is broken, the trend has changed," and as with all of the statements he made similar to this one, it only works under the circumstances that he applied in it. You will notice that the fastest move down in this stock results after that angle is broken. By itself, the breaking of that angle from the low price level and the date of the high, is a tough indication to trade from. I would rather stick with what is simple and what I know works.

The low hit, at fifty percent of the range is six months, or 1/2 year from the high in August of 1978, and twelve months from the low in February of 1978. Of course, we are at one-half of the range in time. This is a setup, not only from the 50/50 setup on the square of the range, but, also, from the cycle of years. Although it is not a great trade, it is a good one. Note, also, that the 2X1 up from zero met the price level during this same period, and provided some support.

Again, I want to emphasize something about the angles. When price is moving down below a 2X1 angle from the high, a strong close above that angle indicates that the down thrust is at least temporarily over, and you can look for long, side trades supported by good evidence. This occurred in June, 1977, March, 1978, March, 1979, July, 1980, March, 1981, March, 1982, July, 1984, and, November, 1985.

This chart has angles from zero, and all swing highs and lows along with time counts from major highs and lows. Once you put all of the information on a chart, it appears confusing at first. As I stated earlier, the first time I saw a Gann chart, I thought there were so many things going on, that something had to work. If you don't know the significance of the angles and counts, this chart will look very busy to you. On the other hand, if you do know those simple rules, such as price moving above a 2X1 angle, you will be able to judge good trading situations.

When the 1X1, or 45 degree angle up from the 1974 low is broken, price has just been at a triple lower top. That is a good indication of strong resistance at that point. Lower double and triple tops are important, and they are things that all traders look for. The same is true of bottoms. The third move against a resistance or support zone, if it holds that zone, it has a high probability of causing a fast move.

You will notice, from the high in December of 1976, price moves down in April of 1980, to the point of being at fifty percent of the high in both price and time. You might use a different method of entry here. However, I would buy when the price proved support on the 2X1 angle up from the low made there, and would consider a high risk position based on the daily charts any time during that month- a good turning point from both price and time. I would assume a three month move up, and during the third month, I would be following the stock closely with my stop. There is some concern with this trade because, at the time of the setup, the 2X1 angle down from the September, 1979 high, is still above price. If price moves above that angle, decisively, I would be more comfortable in the long position.

In September of 1980, the 5th month of the drive up, time is 45 months from top, twelve months from a lower top, and against the resistance of the 1X2 angle down from the high which was exceeded by three points. Then, price gives an outside reversal down. Price has shown resistance here for three months, with tops three times within two points of each other. On a weekly chart, it will be apparent that this stock has lost it's upside momentum. Price, then, drives down from the top month, and for three months into a bottom that is 48 months from top and 72 months from the low.

This move down is a 90 day accelerated move, and would be apparent on your daily chart, as such. So, you would be looking for bottom on the 90th to 99th calendar day of the move in December of 1980. For timing to get out of a short position, or into a long one, you would take the last swing high on the daily chart- before that 90th calendar day- and draw a fast angle, a 2X1, or a 4X1 down. When price broke that angle between the 90th and 99th calendar day, that means the hard down move is over, and it is a good time to take out shorts, or put in a long position. Of course, price is approaching the fifty percent of the high support zone, and you would be asking yourself, "double bottom?" The next high price in the stock comes in the month of April of 1981. This occurs after a three month move up, with price moving slightly higher in the fourth month, and you could consider this a 120 day move, although, it is probably not exactly that. Time is exactly one year in months away from the low of April, 1980. This month of April is, also, the full square of the range from the 1979 low to the 1976 high in time. Note that the full square of the range from the 1974 bottom to the 1976 top, came out in February, but that there was no confirmation in time, and that price was in the second month up from a bottom.

Often, if price sets up this way, as it did in April, 1981, an excellent trade will result. But, as you can see, you will not always get the results you hope for from any one trade. Always use intelligent stops.

After a bear trend in stock, if a bull trend is going to start, price is generally going to have some kind of a sideways move. That move may not always be apparent on a monthly chart, so you should use weekly charts for comparison.

When the 2X1 angle down from the April, 1981 high is broken, the down move is temporarily over. That angle is broken after the five year cycle from top ended in December of 1981, and a double bottom forms. Six months after that double bottom, price breaks down and shows support on the 45 degree angle up from that low. It, then, reverses and closes high, for an outside reversal month up, taking out the 1X2 angle from top. This angle from top has been taken out before, so it is not a strong signal. However, the stock has moved into a strong position from top, and is, obviously, in a strong position from bottom.

If a bull trend is starting, this could easily be where it would start from. Price reverses down the next month- a month with a higher and higher low. The low of the next month is slightly broken in the next month, but price begins to move up, support is shown, and the fast angle up from bottom is recovered. If this is a bull trend, that fast angle up means a fast move, and the recovery of that angle is a good sign of strength. The breaking and recovery of angles on a daily chart can indicate a temporary overbought or oversold condition. On the weekly charts, and especially on the monthly charts, this same action can be quite powerful.

Notice that I have drawn another 2X1 angle up from the low in August of 1982. Price, at that time, held the 45 degree angle from the low. This is a bull trend, and each time that the 2X1 from the double bottom is broken, and recovered, an exceptional move up results until price is nearing a top. The second 2X1 up is not broken until the move up is over.

The strong move up lasts for one month less than a full year from the August, 1982 low, and at a full year from the low of February, 1982. It is one half of the square of the range from the April, 1981 top to the February, 1982 bottom and squares out (as shown by the 2X1 angle up from low crossing the 58 price level). Time is one year from bottom, and six months from where the fast move started on the 45 degree angle. A 90 calendar day move down is already in progress from the resistance at the level of the lower triple top in 1978 and 1979. At the end of this three move, or correction, which is the normal correction in a bull trend, price bottoms exactly on the 2X1 angle up from the August, 1982 start of the fast move. If the trend is to continue, this is an excellent place to buy.

Of course, the idea with this is to show the value of the monthly charts and use of Gann's methods. Once that 2X1 angle up from the August, 1982 low is broken, you should be out of any long positions, if you were not beforehand. You will, also, notice that price finds support from the correction down, that ensues after the break of that angle in January through February of 1984 at just below the 45 degree angle up from the February, 1982 low. In addition, there is a 2X1 angle up from zero, and the date of the November, 1981 low, at the same price level. A small break and then a recovery of those two support angles. Price has already shown support at this level for the two previous months, and June of 1984 does have some prospects for a trade on the long side, just from the angles.

That bottom on June of 1984 came in against the 45 degree angle from the low, a live angle, and the 2X1 angle up from zero. Fast moves start from fast angles, and June is 90 months from top, with support being shown by four monthly bottoms within two points of each other. The sideways move into that fast angle is a good buy. Price moves up for three months before it is at the level of the old top, and then the move looses momentum.

In December of 1984, there is a ten year cycle from the December, 1974 bottom, and because price was moving up into that time period, this would give you the possibility of a top at this point. So, here is a ten year cycle from bottom to top. In addition, price shows support on the 2X1 angle coming up from zero, and stays at this top for three months, before price breaks that angle in March. This is a good indication that the drive up is over. Breaking a fast angle of support at a low level of price is not very significant, but breaking it at a high level is.

Actually, this top has a nice looking, buy setup. Price is at the old top. There are three months of lows at the same price, which would be a triple bottom on weekly charts, or a double bottom, and price moves sideways into a proven support angle. Usually, when a stock breaks to a new high, it will take off up, but in this case, being at a ten year cycle, you would have to be cautious. Even so, you might buy that angle for a three month move up. You are not going to be right all of the time, and that is why you use a protective stop.

If you buy these kinds of setups, you can get very good gains. The idea is to just look for the setup, such as support on an angles like the ones in April of 1983, the low in June of 1984, and others. Hold your stocks or options for three months, and you have an easy way to trade. Always remember to use stops.

Let's look at another setup which doesn't work exceptionally well. The full square of the high comes out in the month of July 1983, and price is near the old top, and in a strong up trend. This time period is important, and because price was moving up, you would be looking for top. Assuming that a short position was taken in July of 1983, for a three month move down (which did not happen), your protective stop would have been moved down. You would end with a profitable trade, although, this correction probably only lasted for about one half of the normal 90 calendar days- 45 days. You see that it doesn't work perfectly all the time, and why you must remain disciplined.

Of course, this is all looking back at price action, but you can look forward to see good times for trades. On the GM chart, you can see that 60 months from the February, 1982 low is February, 1987. In January of 1987, we are two years from the January, 1985 high. In either January or February, the range from that January, 1985 high to the June, 1984 low, squares out. Also, one half of the range from that January, 1985 high to the low in February, 1982 squares out in February or March. I am going to be watching that time period in this stock for a good turning point and trade. The key to the direction out of that time period is, how price moves into it. In general, the time turning points are changes in trend, the beginning of corrections to the trend, or the end of corrections to the trend. So, if price moves down into the period, you can be looking for a long position, and visa versa.

Before you leave this chart and go on to the next one, take a look at the squares of the multiples of the low of 1974- at 29- and what occurs during those months.

MERRILL LYNCH

Now to Merrill Lynch. First, we will look at the square of the high on the weekly chart. The 45 degree angle from the top on 7/8/83 hits zero on 8/10/84, which is, also, 56 1/2 weeks from the top and at a price of 56 1/2. The 45 degree angle from zero and the date of the 7/8/83 top hits the 56 1/2 price level during the week of 8/10/84. Thus, the corners of the square are defined by the high, zero on the date of the high, and where the 45 degree angles up from zero and down from the high cross the level of the high and hit zero, respectively. (Illustrations 8.0 & 8.1)

Since these charts are square, or geometric charts, where the 45 degree angles down from the top, and up from zero on the same date intersect, we have fifty percent of the high price, in both price and time. This is the week of 1/27/84, and a price of 28 1/4. In other words, on the weekly chart, fifty percent of the price level of the high is 28 1/4, and in time, fifty percent of the high is in the week of 1/27/84. On the monthly chart, you will be working with different time periods, but the price level stays the same.

These charts are square, or geometric charts, so where the 45 degree angles down from the top and up from zero, intersect on the same date, we have fifty percent of the high price, in both price and time. This is the week of 1/27/84, and a price of 28 1/4. So, in other words, fifty percent of the price level of the high is in the week of 1/27/84, on a weekly chart. On the monthly chart, you will be working with different time periods, but the price level remains the same.

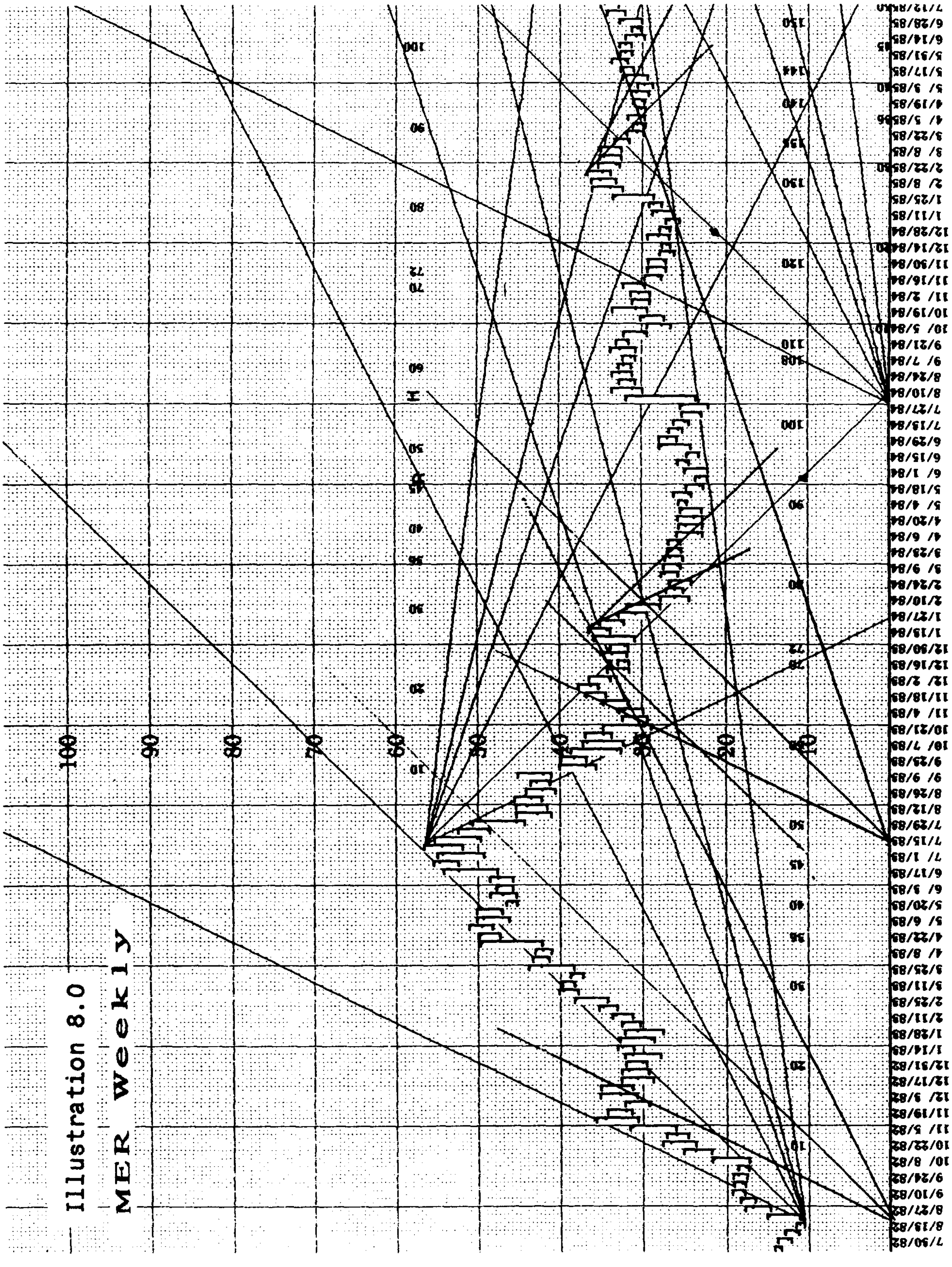

Illustration 8.0
MER Weekly

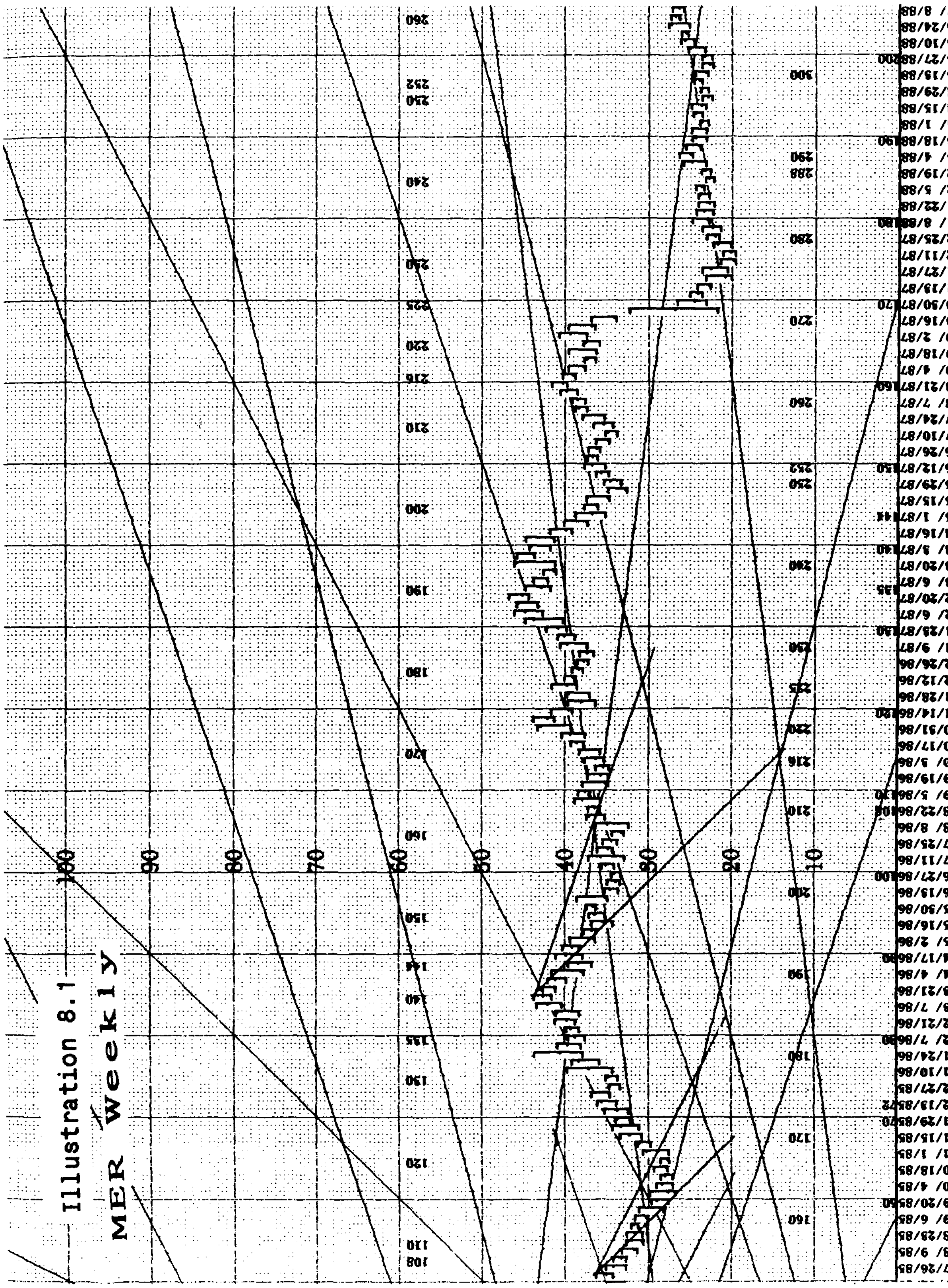
Illustration 8.1
MER Weekly

The 2X1 angles from top and zero intersect zero, and the price level of top, respectively, on this same date, 1/27/84. When the 1X2 angle from top crosses the end of the square on 8/10/84, it indicates, once again, the fifty percent mark on price. If this angle is extended to zero, you will see that it gives us the date of the second square of this high price on 9/6/85. This is, also, shown by the "H" on the chart at that date- 113 weeks from the week of the high.

So, from the top on 7/8/83, there is a 1X1 angle which cuts the square in half from corner to corner. The next angle up is a 1X2, which indicates fifty percent of price when it reaches the end of the square. The next angle up is a 1X3, which, when it reaches the end of the square in time, and at a price level between 37 and 38, indicates two thirds of the square of the high price level. The next angle up is 1X4, so when it hits the end of the square between 42 and 43, you have a price level that is 3/4 of the high price (squaring of the high). The last two angles coming down from the high price are a 1X8, and a 1X16.

Remember our rule- the first time price comes down to fifty percent of the high, is a good time to look for a buy point in the stock. This happened with Merrill on the week of 10/21/83. On 1/20/84, Merrill turned down one week prior to the fifty percent of the high in time (where the two 45 degree angles intersect on 1/27/84). Hence, there was not a good setup at fifty percent in time. Merrill found bottom on 3/8 of this square of the high, which is the next support level after 50 percent of the square. Once fifty percent of the range of price is broken, the square of the high becomes very important.

When viewing the square of the high, as long as price remains below 56 1/2, every fifty percent, and full division in time should be marked on the chart. The first square of the high came on 8/10/84. One and one-half squares in time would be 84 3/4 weeks, two squares is 113 weeks, and 2 1/2 squares is 141 weeks. The third time the square works out is 169 weeks from the 7/8/83 high, or October 3rd, 1986.

Next, we look at the square of the range, which Gann said was on of his most important squares or cycles. If in your own analysis you should decide to draw out full squares, you could use a colored pencil to draw these squares so that they are easily distinguishable from the square of the high. Again, on the weekly chart, where the 1X1 angle from top reaches the price level of 10 1/2, the level of the old bottom on 8/13/82, this indicates the end of the square of the range from the 10 1/2 low to the 56 1/2 high, or 46 weeks or points. You can see this point on your charts where a small line intersects that 45 degree angle on the date of 5/25/84, at price level of 10 1/2. The 45 degree angle, or a 1X1, up from the 10 1/2 price level, starting at the date of the high at 7/8/83, completes the square of the range.

Where those two 45 degree angles intersect is fifty percent of the range in price between 33 and 34. This is, also, fifty percent of the range in time at 12/16/83. After falling well through fifty percent of this range, the first time price came up to this level in August of 1984, resistance to the move was found. The level was tested three times in the coming weeks before a breakdown, and a forth test, which also, failed.

Finally, the second range from this high would be the range from the high price to the low price at 27 1/2 during the week of 1/28/83. The 45 degree angle up from that price level, and the date of the high crosses the 45 degree angle down from the high during the week of 10/21/83, indicating fifty percent of that range in both price and time. As you can see in the drive down from top, support was found at the fifty percent mark of this range for some time before breaking that level. In addition, when fifty percent of the range came out in time, price was near the bottom of that range and very close to fifty percent of the high price in the week of 10/21/83. The first rally, in the drive down, ensues from this time and support level.

Now, let's look at the square of the low. You should use the square of the low in, both, price and time. From the 10 1/2 low on 8/13/82, you should count over multiples of that low, or squares of that low price, paying particular attention to the 1st, 3rd, 7th, 9th and 12th squares of that low price. The bottom of 22, in the week of 6/1/84, was at the square of the range and the 9th square of the low in time. The small tic marks every 10 1/2 squares from the bottom, are the counting off of the squares of the low. Actually, a double bottom formed at 22, so we should, also, look for resistance at 33, which is fifty percent of the 22 price plus the 22 price. Resistance should be found at a full 100 percent of this 44 price.

You may have already noticed that the cycle of years on the Merrill weekly chart is somewhat difficult to find, as it was on the Control Data chart. There are some relationships on this chart to the cycle of years and the 13, 26, 39 , etcetera counts, but they are elusive during this phase of the stock's price action, at least on the weekly chart. The square of 90 counts show a better relationship here, and to see this, look at the weekly chart and the high of 2/15/85. Notice an 11 week count to 5/3/85 is a bottom, 22 weeks for a top, then 33 for a bottom, 45 for a bottom against a 1X2 angle, and 56 weeks is a top. But, let's look at the monthly chart to see if this stock follows the cycle of years in the same fashion.

On the monthly chart (Illustration 8.2), you'll see that bottom was found in July of 1984 against a 1X2 angle coming up from the August, 1982 low. This bottom was found in the last week of July, almost 24 months from the August, 1982 low, and twelve months from the 1983 top. From that July, 1983 top, two years is July of 1985. From the high in February of 1976, two years is the low in February of 1978, and 6 1/2 years is the low in August of 1982. The high in February of 1980 is four years from that 1976 high. From the low in September of 1974, 15 months is the December low in 1975, 48 months is the September high in 1978, 120 months is September of 1984, and a ten year cycle from low to high.

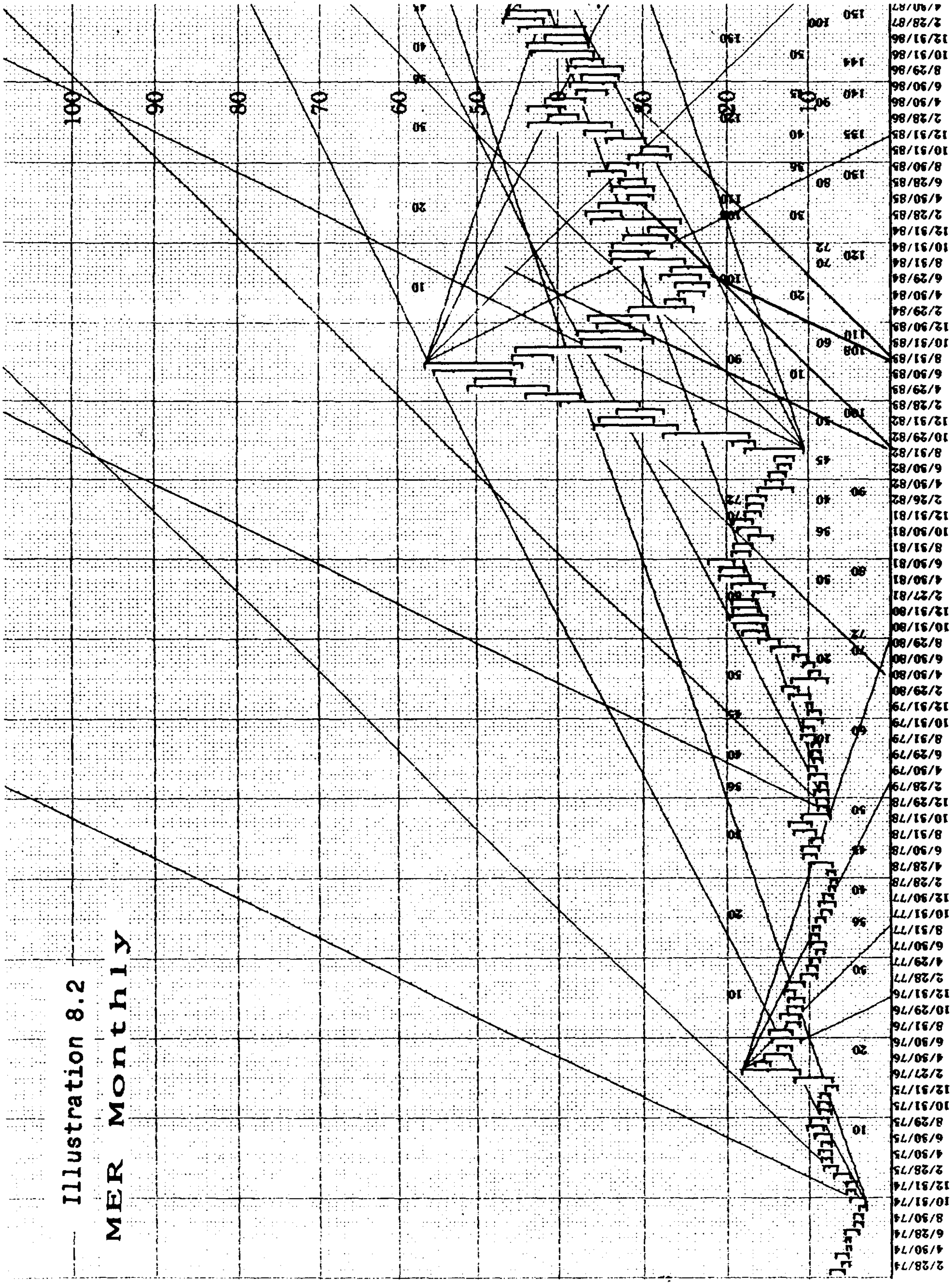

Illustration 8.2
MER Monthly

On the weekly chart, from the 8/13/82 low, 13 weeks is the 11/12/82 high and the start of an 11 week consolidation. On the daily chart this would look very much like a 90 day blow off move, with top to be found on the 90th to 99th day of the move up, and using these methods, you may well have gone short at this time. You would have gotten an 11 day move down (trading days), and would not have found an exceptional trade, although it would be a good one if you had used good stops. One point to make here is that you should, also, use the calendar days counts and cycle of the year counts on a weekly chart from the start of fast moves, such as the one in the week of 10/8/82. Thirteen weeks from that week is a minor low in the week of 1/7/83. Twenty-six weeks is the second week of the small correction down in 4/8/83. And , last, 39 weeks is the week of 7/8/83.

Now, let's look at angles from zero. There is a rule that Gann used dealing with the 45 degree angles from zero which come from the date of a bottom on a weekly chart. This chart is a prime example. The rule simply states, if this 45 degree, or 1X1, angle from zero is broken at a high level, it is a good indication of trend change. The week of 7/29/83 is the week this angle was broken, and this indicates that the trend, which has been up, was changing.

Back to the Merrill monthly chart. In September through October of 1985, support was found on a 45 degree angle from zero, coming from the date of the July, 1983 high, and, also, on the 1X2 angle from the July, 1984 low. The price level at this point is 1/8 of the range from the high at 56 1/2, to the low at 22.

If you look at the weekly chart during October, you'll see support being shown by price, trading four weeks within the range established during the week of 9/27/85. The break out came in the first week of November- specifically 11/1/85, the third square of the low in weeks. Also, on the weekly chart, this is the square of the range from the 7/12/85 high. The 45 degree angle down from that top hits the 22 price level. On the weekly chart, price moved above the 1X2 angle from that top, and on the monthly chart, price moved above the 2X1 angle from the July, 1985 high, putting the stock in a stronger position.

I would suggest that you study the monthly chart and the effect angles from zero have on price action. Notice the months from which the angles originate, and the price action in the months when price meets those angles.

Gann continually used the phrase, "You can look for a change in trend." This statement is very important to the philosophy of trading. When turning points are developed weekly, check the position on monthly charts. Is price in a strong position, above a fast rising angle up? Is price moving down on the weekly chart, following an angle? Is the price movement down on the weekly chart within a normal corrective pattern for a bull move- three weeks, or the same as previous movements down in the trend? Is the move down three days, or thirty calendar days? Is it the normal bull campaign monthly correction of three months, or 90 calendar days?

Look at the Merrill Lynch weekly chart. Price moved down from a double top on 3/14/86. On 4/11/86, a low was found, indicated by price closing in the upper part of the weekly range, but price had broken down through the 1X2 angle from the 9/27/85 bottom, which gave support on 12/27, and again on 1/3/86. The correction down exceeded any previous correction. The double top was bearish, and the bottom did not come in on a support angle. This is all good evidence, but the market is strong. Could Merrill start a new drive up from that low on 4/11/86?

Go to the monthly chart. Here you will see a 2X1 angle from the low of 9/30/85, which was then broken. This puts price in a weakened position. The high month was after a drive of six months, a normal time period for top (180 calendar days), but price is, also, above the 1X1 angle up from the same bottom. So, this lends strength. May and June present a square of a range, where a 45 degree angle from top hits the 22 low price, giving a time to look for a change. The 60 month, or 5 year cycle indicates bottom in June. July is 24 month and 36 months, or two years from a bottom, and three years from a top, and one year from the July, 1985 top. Therefore, there is nothing on the monthly charts to indicate April as a change in trend.

The assumption is that the trend is still intact, so if we want to go long, a good setup would be a close above the 2X1 angle on the monthly chart. This would indicate a resumption of the trend. Of course, from a double top, a three month move down would put bottom in June, and if the bottom is similar to the September through October bottom in this stock, it could last into July and the significant cycle of years time period.

Back to the weekly chart. In 4/18/86, we see that the 1X2 angle from bottom and the 1X2 from top intersect at a price of 41. That level would be extremely difficult resistance in the week of 4/25/86, and if overcome, would indicate that a fast move up in price was due. Moreover, this would have been the ideal place to short, or buy puts. But at that time, the market was giving the appearance of breaking to new highs, and you might have been looking for evidence of an upside break out in Merrill.

The reason that I say this is that I want to emphasize that it is quite important to divorce yourself from the market when analyzing individual stocks. It is, also, very difficult. Individual stocks are often moving in different directions from the general market. In this situation, with price moving up to (or down to) a conjunction or intersection of two geometric angles- which move at the same rate- is always very significant. The price that turned Merrill down was 41, and will remain significant.

On the Merrill weekly chart, notice the top on 7/8/83, and that as price moves down, the highs for the week are exactly on a 2X1 angle down from the top. This indicates the stock is in a very weak position, unable to move above a fast falling angle. When price moved sideways through that angle on 9/2/83, and 9/9/83, the next important resistance was the obvious 1X1 angle. But, just as important, was the last price that was hit by the 2X1 angle on the week of 8/19/83, the price of 45 1/2. If that price was broken, it would be significant, but it is, also, the next resistance to look for a short position entry during that time frame.

Of course, 45 is a number which would be natural resistance. This would be confirmed by top at 56, and 45 being eleven points down from that top. We would, definitely, look to short this stock, at that price. Due to the price level being below a 2X1 angle down, on the monthly chart, and below the 1X1 down, on the weekly, it is a weak position. In addition, after having moved down at high momentum for a long period of time, the 45 degree angle down from top, on the weekly chart, would be another high probability price level to go short. That price level hit on 11/25/83, then becomes good resistance.

Starting on 7/8/83, look at the 2X1 angle from zero. Price hits that angle on the week of 10/21/83 at 29 to 30. This becomes important support. Price moves down to that angle on the week of 1/27/84, and the 45 degree angle from zero is at 29 on that week. Should you buy? On the monthly chart, price is still below a 2X1 angle, in a weak position, but on the weekly charts, it is above the 45 degree angle from top. The important feature, here, is that high hit on 1/13/84, as all weekly highs since that time have been against a 2X1 angle coming down from the high, again, a weak position, and the pattern established in July of 1983 could repeat-that is finding bottom after a sharp move down. There is a square of range coming in at this time, but price would have to move above the 2X1 angle down from the high in the week of 11/13/83, before that move down is over on the weekly chart.

You can see price was in a very weak position, and you might have been buying puts against that 2X1 angle, and looking to sell those puts on the first weekly close above that angle on the weekly chart, from the 1/13/84 high. The drive down stopped the 78th week from the low of 8/13/82. Always use evidence to confirm a turning point in time, support or resistance.

POLAROID (PRD)

Now, use the Polaroid monthly chart (Illustration 8.3). Polaroid hit a high at 144, and I was watching this stock to come up to fifty percent of the high at 72, as well as, five times the low at 14 1/4 is 72. The rule is, the first time a stock comes up to fifty percent of the high, after having been below it for a long period of time, it is a good short candidate at that level.

On the daily chart (Illustration 8.4), you can see the first test of 72, in March of 1986, comes after an extreme price acceleration. The first high, at 70 1/2, comes on the 90th calendar day from the December 4th, 1985 low. Price breaks sharply after this date, but bottoms and gives one more drive up into the 99th calendar day from low, and up to fifty percent of the high price made over a decade earlier. This week is 26 weeks from the September 13th low, and an excellent time and price to trade.

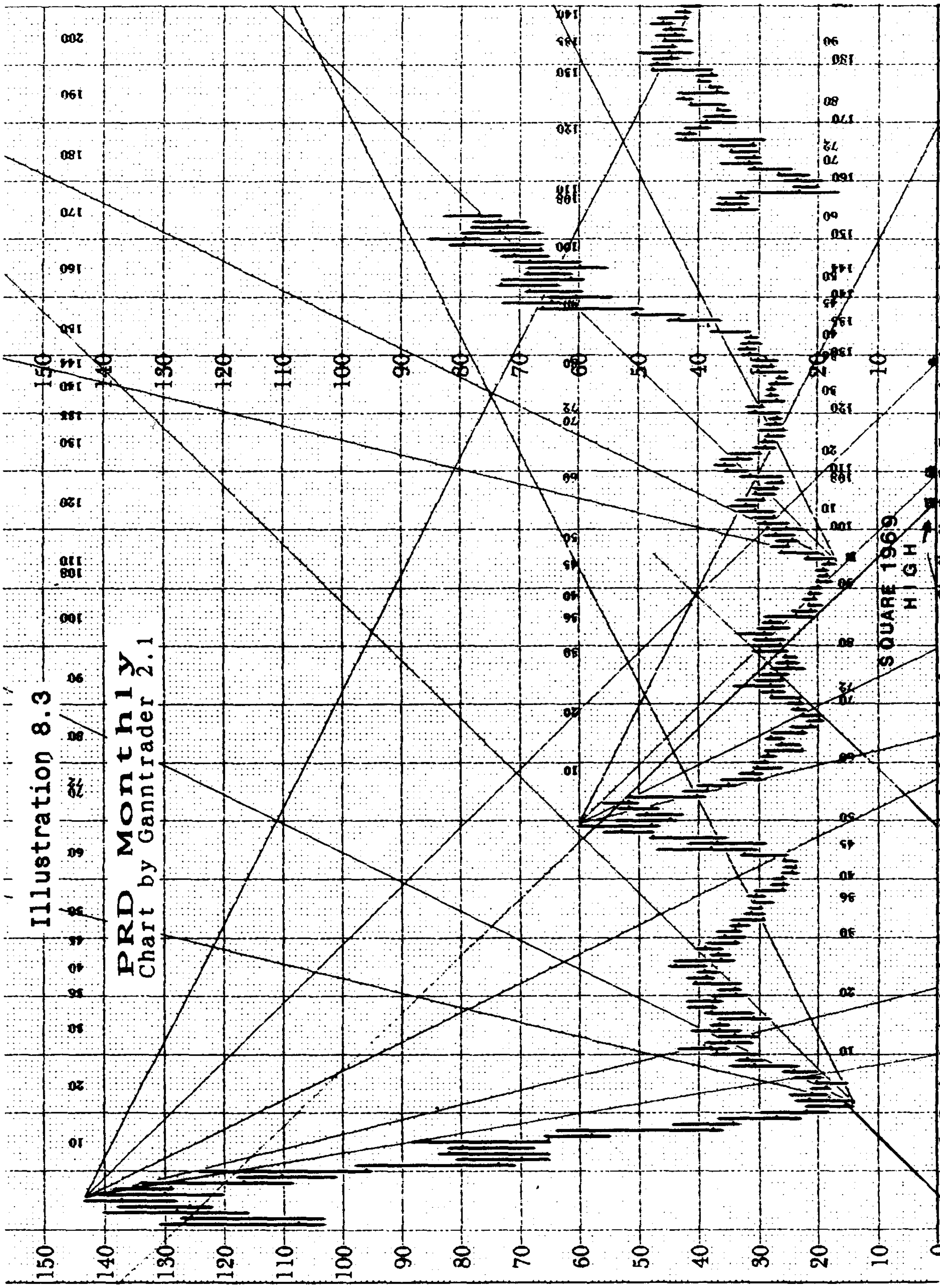

Illustration 8.3

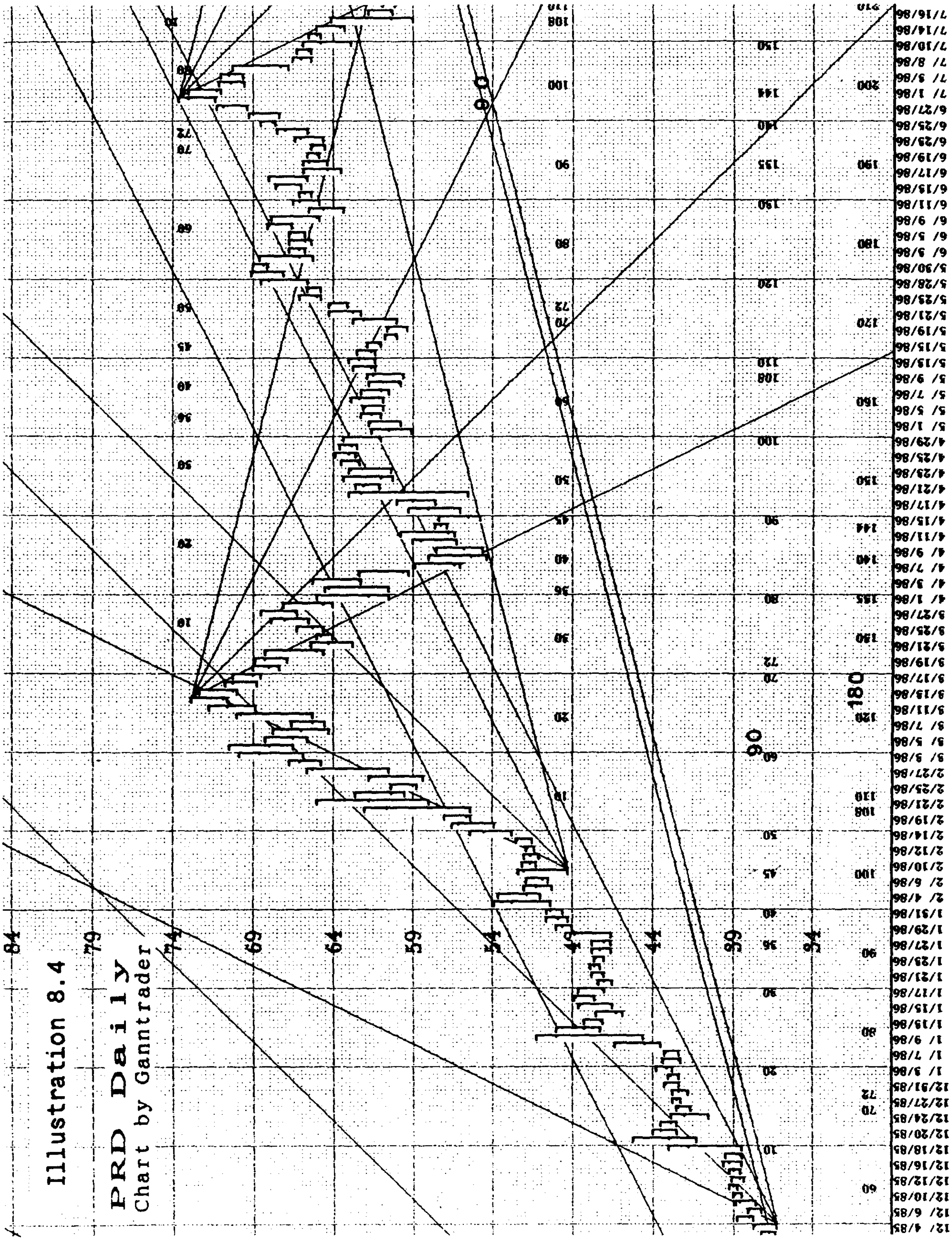

Illustration 8.4
PRD Daily
Chart by Ganntrader

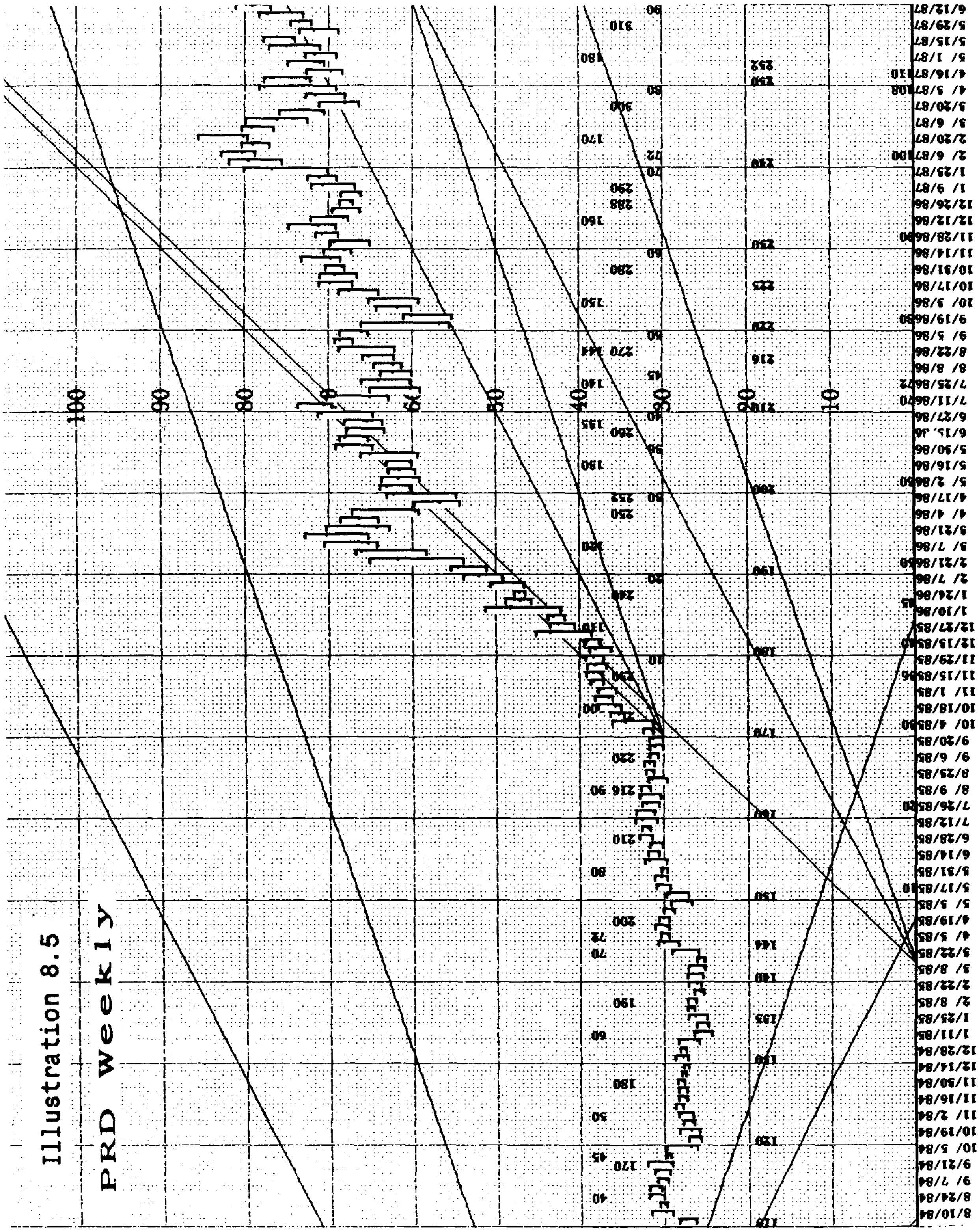
Illustration 8.5
PRD Weekly
100
90
80
70
60
50
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20
10

The weekly (Illustration 8.5) and daily charts indicated this time frame as an important turning point. However, other than the fifty percent of the high price situation, and the fact that Polaroid moved back up to test this same price level in July of 1986, the monthly chart did not.

When the price of Polaroid's stock hit 73 on the week of July 4th, 1986, the July, 65 puts were selling for 1/8, because they were going to expire two weeks later. Those options were at $6 on the expiration date. There are some high risk trades that can be exceptional. This one is a price multiple of 48, so a $500 risk would have returned $24,000. I don't want to recommend that type of trading for anyone. It's for the individual who wants to take such trades, and can feel good about doing it. Whatever you do, do not risk a large amount of money on such a trade. I personally traded an option series with a later expiration. Remember, trading is a business, and this type of risk, an "all or nothing at all" situation, should be played very lightly.

Look, again, at the monthly chart. Notice, the drive down in this stock, which was an extreme move from the high at 144, moves down for six months, spends three months on the side at fifty percent of the high price, and, then, gives an outside reversal month down in a move that is not over for seven more months. Finally, it shows tenable support on the 1X1 angle up from zero and the date of the high. At this point, price finally found a bottom at about 1/10 of the high price, and although the stock was still well below the 2X1 down from high, if the correction down was not over, the company was going bankrupt. Polaroid took years to take out the 2X1 down from the high, which it did in March of 1978, and when that happened, you could say the correction down was over. Notice, when price does finally move through that 2X1 angle down from top, an acceleration up occurs. In addition, the high price in September, 1976, was fifty percent of the lower high in March, 1974. The high in September, 1978, was just two points shy of fifty percent of the high, in October of 1973.

Daily Chart and Turning Point Days

So far, for the most part, we have looked at the weekly and monthly charts, including squares, angles, and the cycle of years. The reason for this is the major moves in the price of a stock will be indicated by the longer time period charts. If you are looking for major moves, you should make trading plans from the weekly and monthly charts. Once a plan is developed, the daily charts will be very useful for determining when to trade, or what days to look for positions. With this in mind, we will look at the daily charts and the turning points which develop from this work.

CITICORP (CCI)

Let's look at an acceleration in price with the Citicorp daily charts. (Illustration 8.6 & 8.7) Begin with the high on December 16th. The six day correction down shows support at a 1X2 angle from the October 25th low on December 24th, with the low and support being held the next day. Price had a strong close, coihciding with a 90 calendar day count from the September low, issuing a buy signal. On the 180 calendar day cycle from a July top (not on the chart), a high is found and price corrects for five days. A two day rally follows, and then price turns down at a 2X1 angle (a fast angle) down from the top on January 16th. You would have been out a short term long position by this time. The correction, again, lasts for five days. Next, price turns up for four days and then gives a five day move down to the fifth of February, where a double bottom is shown 90 market days from the September low, and 30 calendar days from the high. This is a good buy point. Price movement down, in this five day correction, is considerably less than the previous five day correction.

After a considerably longer move up, the next correction down in price, is four days in length. This four day move down ends in a reversal day on February 24th. This, also, shows a minor square in price from the January 29 high to the level of the double bottom, on the 5th and 23rd. Price breaks and recovers the 1X1 angle up from the 2/5 bottom, a continuation signal for the up move.

Price fails on the 28th of February, at the old top, and a three day correction follows (March 5th), after which, price finds support on the fast moving 2X1 angle from the 2/24 low. Note, the corrections down, on 3/5 (on the fast moving angle) shows that a valid break out move may be starting.

With the fast angle showing support, and once again, being 90 market days from this time (the October 2th bottom), this setup is worth buying with a stop, 1/2 point below the level of the fast moving 2X1 angle up. The correction from the March 14th high is only one day, and again, support is found on the 2X1 angle.

By this time, we know we have an acceleration in price, and that we should see three Elliott waves in the drive to top. The next correction on the 21st of March 1986, is one day, but it is an outside reversal day and a sign of weakness. Price moves sideways into the 2X1 angle, and accelerates into the 27th of March.

Notice, on the Citicorp chart, the good turning point setups for March 27th or 31st, as well as, the excellent setup for turn on the 7th and 8th of April.

So, a considerable amount of information regarding timing and support levels can be gained from the daily charts, alone. Once again, I would like to point out, that for long term trades, and good knowledge of trend, the weekly and monthly charts are far more important than the daily charts.

On the Citicorp monthly chart, you will see two points circled, noted as "swing." (Illustration 8.8) Those points are

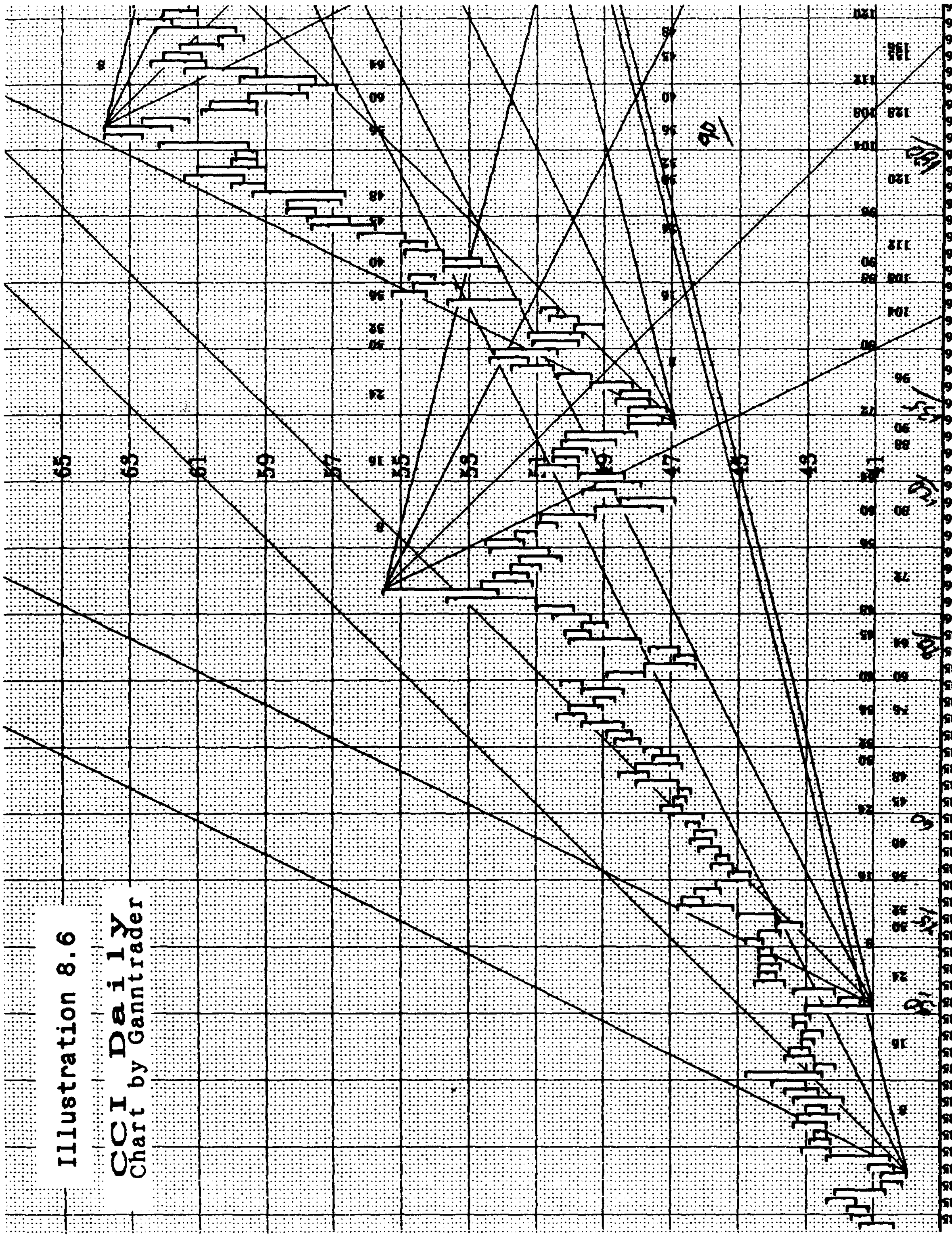
Illustration 8.6
CCI Daily
Chart by Ganntrader
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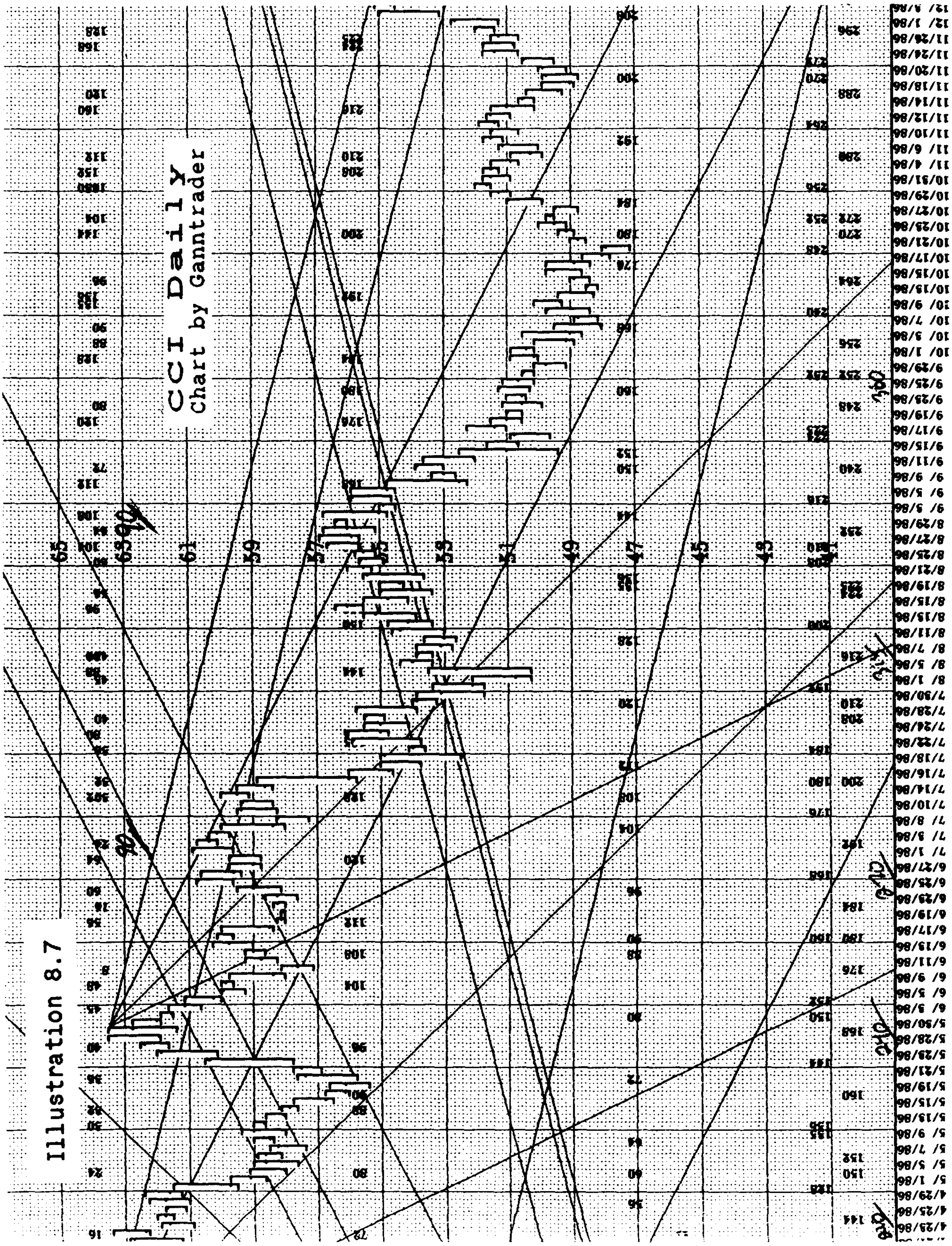

Illustration 8.7

levels of the following: One, the full range of movement from the price at the 1983 high, down to the June 1984 low (or 19 points), added to the 1983 high of 46. This gives 65 as an objective (swing objective). Second, is from the high in July, 1985, to the low in September, 1985 (or 12 points), added to the high of July giving 64 as an objective. So, we know that with 100 percent of two ranges coming out in price in the areas between 63 3/4 and 65, that there will be significant resistance in that price action.

Now, move back to the daily chart. There was a low at 40 on September 26th. The low on October 25th was 30 calendar days from that previous low, and was where the strong drive up started. So, either of those two dates would be important to run the calendar day cycles from, but since the date of October 25th was 30 calendar days from the previous low, the counts from the September low, also, count for the October low, by subtracting 30 days from each count. Therefore, 180 calendar days from the October low is 210 from the September low, and so forth.

The turning point that was developing for the 25th through the 27th of March, 1986, was a good setup for a correction. Since we couldn't qualify this movement up as a blow off in price, there would need to be a period of time to allow for distribution before any serious trend change to down. Price broke the support angle on April 2nd, and forward from that date, the next turning point would be April 7th or 8th, with a few daily ranges squaring out, including the significant range from the January high, to the low made on in September.

If you will check your weekly chart (Illustration 8.9), you will see that the weeklies have a range squaring out in this week, and price moves down into that time frame, testing a fast angle up from zero, which could yield a fast move up. This angle is reached in the 6th day down from top, which is the longest period of time that this stock has corrected in the drive up, and is, therefore, significant. The angle gives support, but the move up is laboring as it approaches the old top. As price moves into the 210th calendar day from the bottom, or the 180th calendar day from where the trend turned up, we see the familiar setup of a high day followed by a sideways move of 4 to 5 days, and then price breaks the low of that sideways move.

Citicorp is showing a double top in April, while the market is moving to new highs. After this correction down, price moves up quickly to the old high, and then shows a triple top, which is not on this chart. I had marked the period between July 3rd and July 7th as a significant turning point because time was 360 days from a significant high, and 180 days from a high.

Study the daily chart. Look at the reversals that happen when minor or major ranges square out (which I have marked with arrows on the angles), and you'll see a very strong probability of finding a reversal. If price is moving sideways, then price will often give the start of a move out of that sideways formation. Certainly, the squaring of ranges on the daily chart gives us turning points, but the ability to qualify the move is very

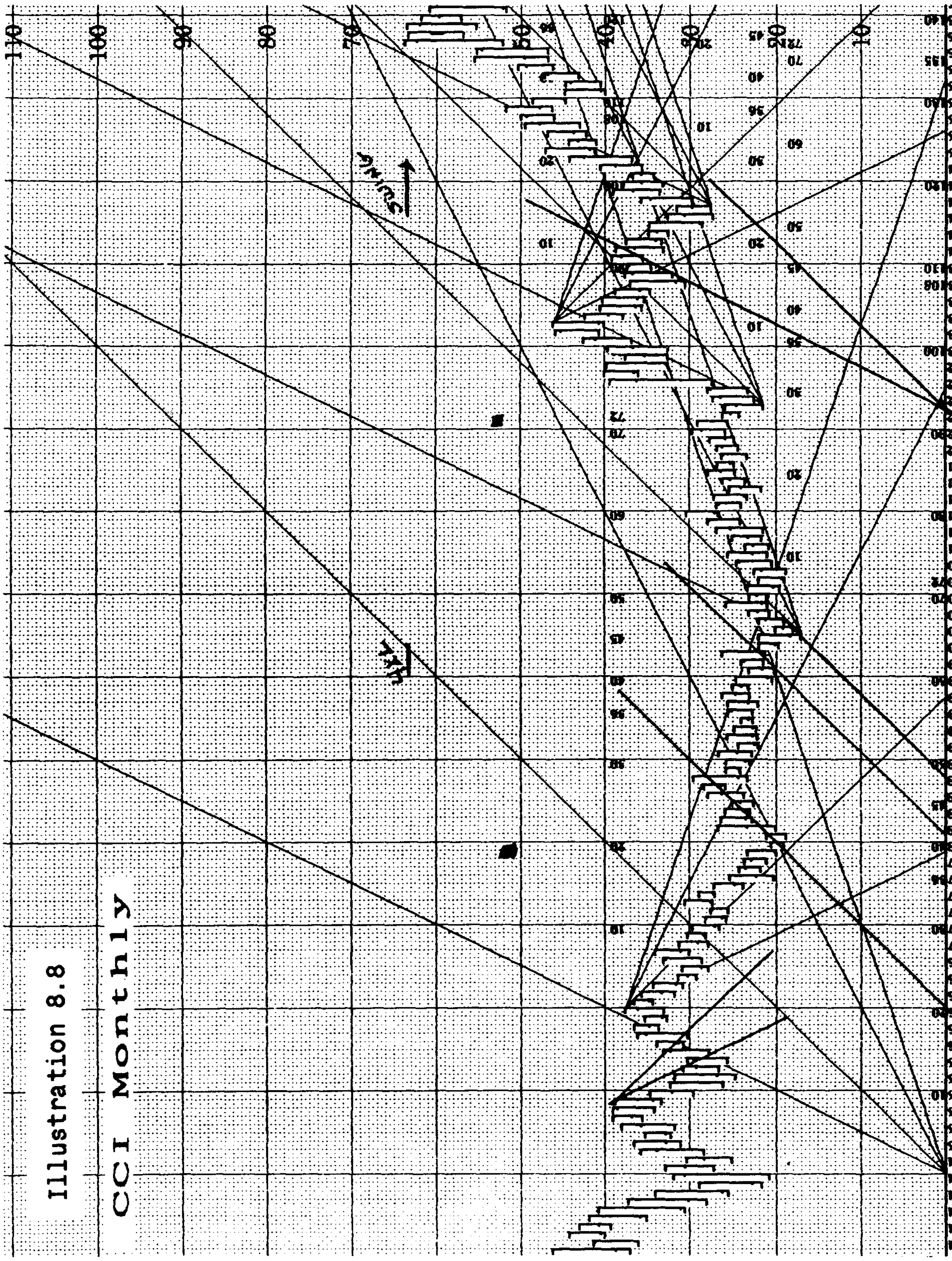

Illustration 8.8
CCI Monthly

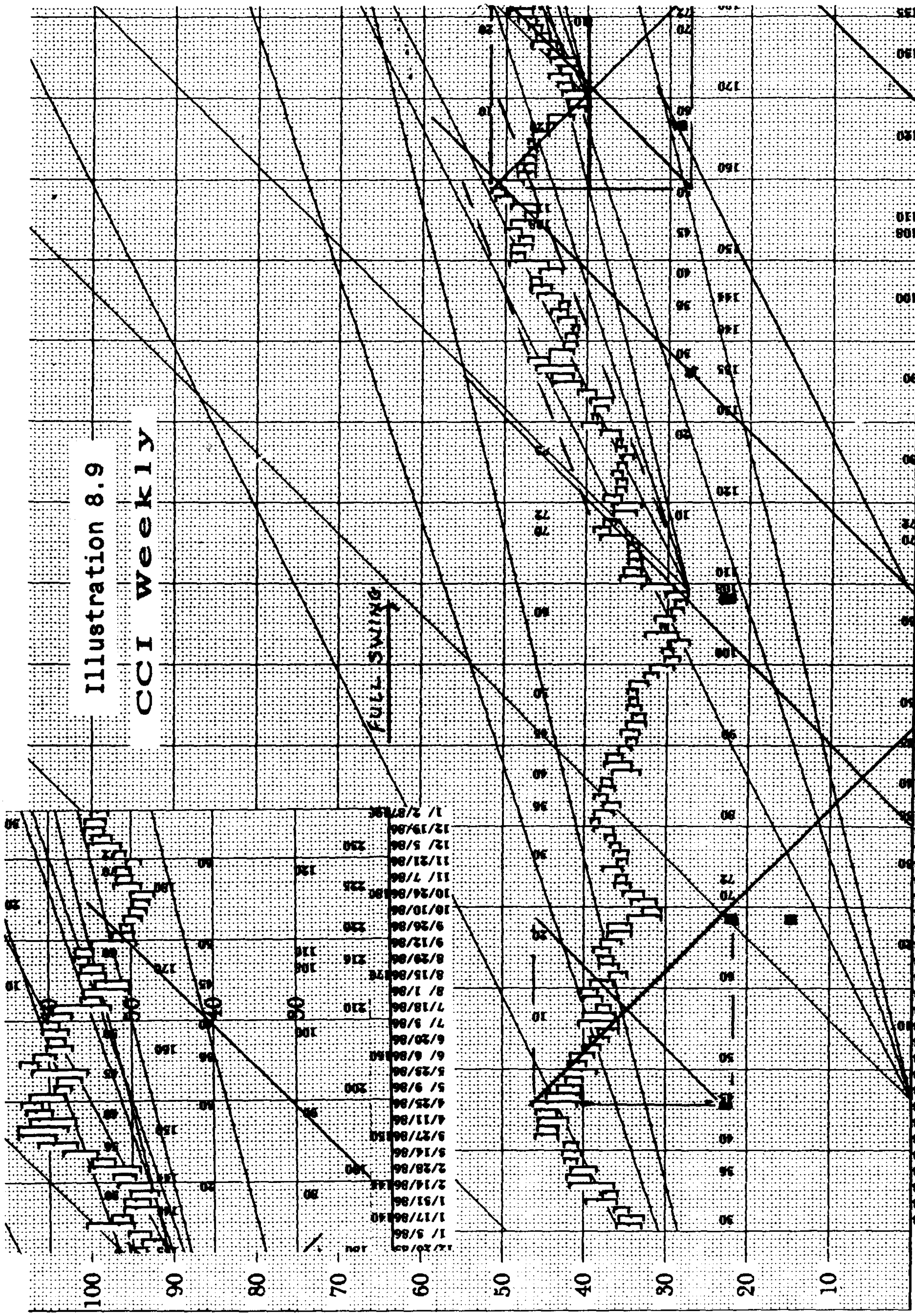
Illustration 8.9
CCI Weekly
FULL SWING
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difficult. By qualifying the move, I am referring to being able to judge the extent and momentum of the move resulting from any particular, daily turning point. A certain amount of this qualifying of a turning point can be done as price moves into that date, by asking yourself questions such as, "If price does turn down here, what will the chart show- a double top- or similar situations?" Try to visualize the importance of a move. But if you are using the weekly charts to develop turning points, as with the week of April 28th, which was the full square of the range from the January high to the September low, you would know that any daily turning point during that week could be quite significant.

There is another way to qualify the week of the 28th. If you recall, we showed that a perfect triangle can develop in the chart pattern from the angles, and when that situation occurs that it lends credence to the resulting turning point on the daily charts. You will notice that we have the same situation here- only on a weekly chart. The high on the week of January 10th was exactly (and this must be EXACTLY) on the 45 degree angle up from the low, the week of 9/27/85. So, when the 45 degree angle coming down from that January high squares the range with the September low, it has greater implications because a triangle is formed.

Again, looking at the monthly chart, we see that September squares June, 1984 low, and is, also, 12 months from the September, 1985 low. October is 156 months, or 13 years from top, and 144 months, or 12 years, from a low. We know to watch CitiCorp closely during that 60 day period. If price is at 52 and showing support, it would be indication to buy. There is a 2X1 angle drawn down from the March high, as well as, one drawn down from the May high. Once the 2X1 down from the May high is broken by price moving through it, you can feel confident that the down move is over.

IBM

Now use the IBM daily charts (Illustrations 9.0 & 9.1). You will see a fast move going into December, where a 90 calendar day count expires on the 24th, and a 180 calendar day count on the 18th. If those counts showed up on the same day, you would look for top or bottom on that exact day. But, since there was a fast move for 90 days, you would look for a selling opportunity between the 90th and 99th calendar days from where the drive started. Knowing if top is found, there will be a secondary rally of one to three days yielding a lower top, or three days to a higher high with a loss of momentum on this move up. This is a safer place, in which, to enter a short position.

Notice, that from the bottom in September, the first movement finds support on a 1x2 angle on October 28th, and then accelerates on a 1X1 or 45 degree angle from that low. That 1X1 angle is broken on December 2nd, but the low of the day in which price broke that angle holds, and on the third day, price turns up and recovers the angle. Then price accelerates again, finding support on a 2X1

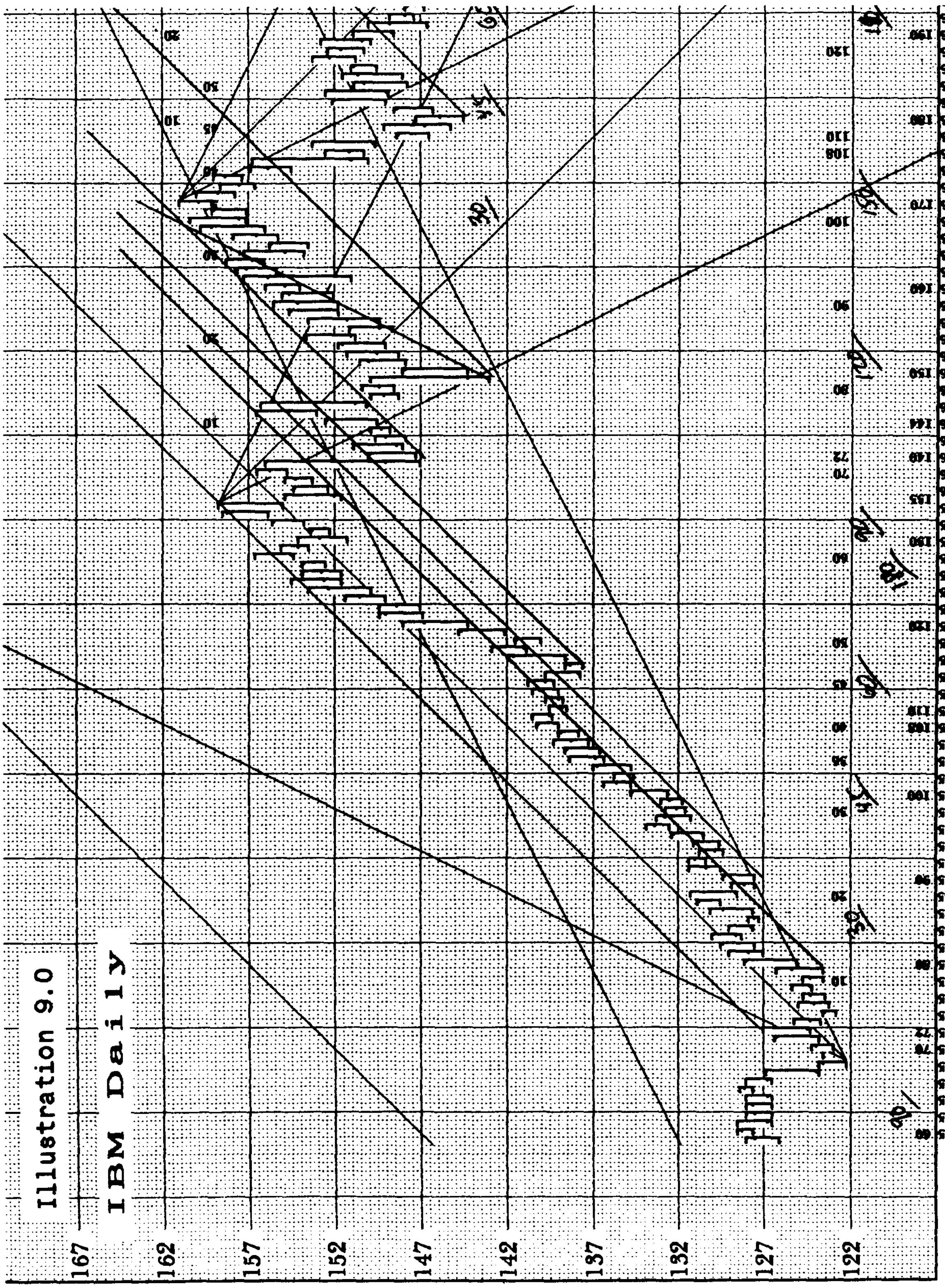
Illustration 9.0
IBM Daily
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142
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127
122

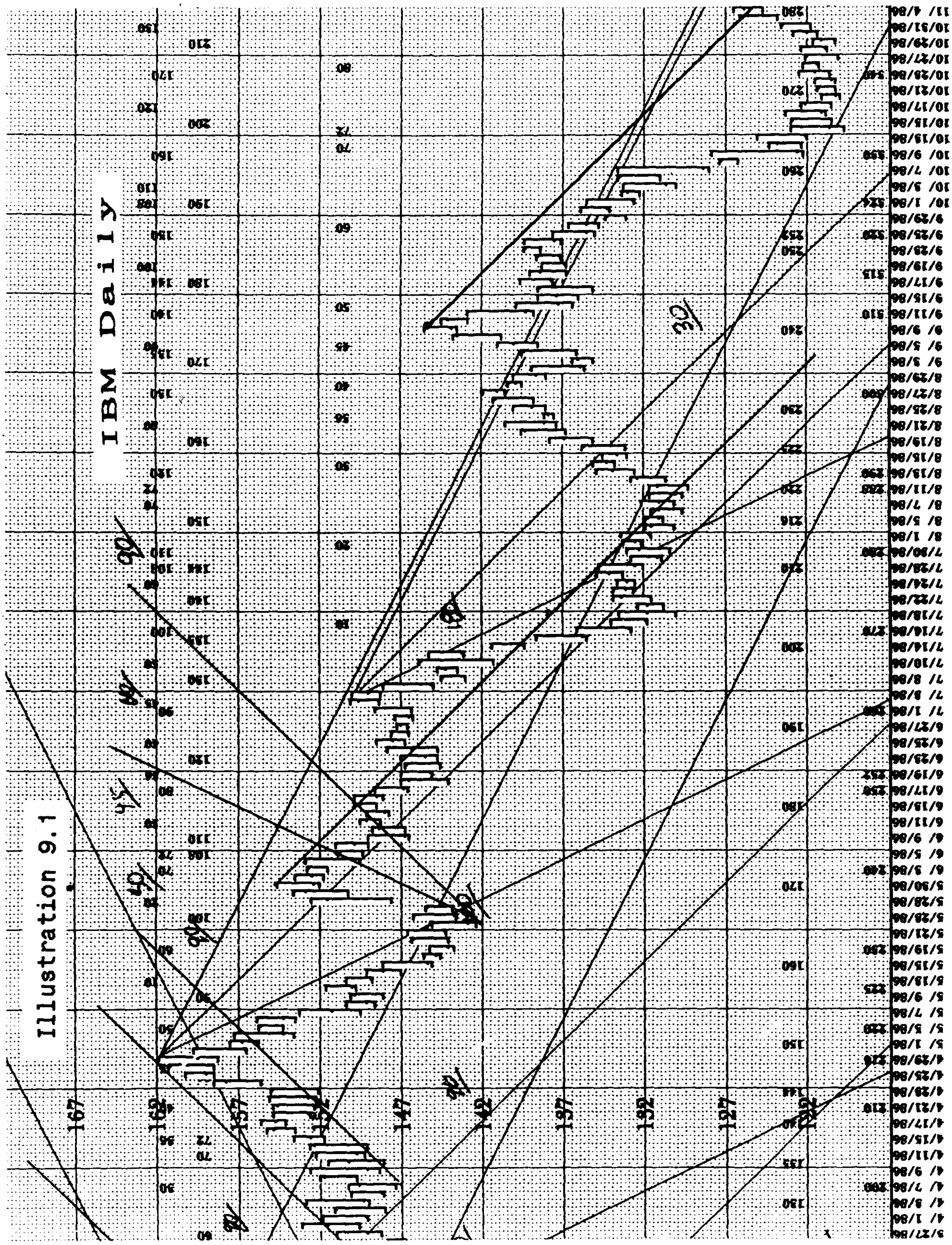


Illustration 9.1
IBM Daily

angle, a fast angle up on December 6th. This is a good indication that the acceleration into top is beginning.

On December 31st, price shows an outside reversal day down. This is a good indication of weakness, and a trendline up from the high on 12/17, to the high on 12/20, and continued upward to the 31st, will show that price has shown a loss of momentum on the upward movement.

On the third day up of the second rally, the seventh of January, resistance is found on the 45 degree angle down from top. Remember, the three day move against the trend. So, on January 7th, the setup is as follows. Time is past 90 calendar days from the September bottom. In addition, time is past 180 calendar days from a previous bottom. There is a loss of upward momentum, and the third day of this rally brought price up to a 45 degree angle down from top. Price is at resistance. If, on the rally, price had only been able to come up to the lower resistance level of the 2X1 angle down, then the resulting move down from this resistance would likely be a fast one.

There is no good setup on market day counts, but price is 270 trading days from the bottom (not on the chart). Therefore, a high risk put position could be taken, using a protective stop a little above the 45 degree angle, which price had shown resistance. An objective for such a trade could be the 45 degree angle coming up from the December 3rd bottom, or about 149 1/2 on the eighth of January, 150 1/2 on the tenth, etcetera.

Notice that the angle from the September 26th low, comes up to that level of 158 1/4 on January 13th, thus squaring with the high price. That could be your objective in time. Eleven trading days from high could be a possibility, too. But you would not want to get greedy and should close the put position out on the first move down to that 45 degree angle up from the 12/3 bottom. In a situation such as this, you must always remember that distribution has not taken place in the stock, and that, although it may not go higher, a test of the previous highs would be likely. The next day, the 8th, price hits 149 1/2, and you would sell the put position, having picked up five points on the stock with a big down day, as well as, a premium expansion in the puts.

The next turning point is that squaring of price, on January 13th. This is not an exceptional setup in time (using the counts), but support is being shown on the 45 degree angle up from the low on the 8th, with minor breaks and recoveries of the angle on the 13th and 14th. If you had not gotten out of your short position earlier, this support, and the assumptions about a possible test of the high should be enough evidence to take the position out.

On the 15th, the drive up begins from that support angle, and moves above the 2X1 angle down from the lower top on the seventh, an indication that the sharp down-thrust is temporarily over.
Remember, you should seldom take a long position in circumstances like this until price can move above a 4X1 or 2X1 angle down from top if price is following either of those angle down, unless there is more substantial evidence from a longer term chart. This is,

also, true of taking short positions in what is a general bear trend when price rallies above a fast rising angle. Those fast angles, both down from swing highs and up from lows, indicate extreme momentum, and you will seldom want to position against it.

On the 11th day from top, price is stopped by resistance at a 1X2 angle from top, and closes below that angle. The pattern could be considered a lower double top from the secondary high on the 7th. This is a decent setup with the 11 market day count with resistance being shown. Also, it is 30 trading or market days from the December 3rd low. The first objective would be the support level from the 1X1 or 45 degree angle from the January 8th bottom.

Notice that the 60 calendar day count from the January 22nd bottom, underlined on March 22nd, was the last low for a drive into top. Pay close attention to the 90 calendar day counts from significant dates on the daily charts. These may not always be accelerations into a top or bottom, but are often very significant time periods for any stock.

Let's get away from the chop of the daily charts and use the IBM monthly chart (Illustration 9.2). The first major range of movement we want to look at is the range between the February, 1973 high and the 1974 low. The 45 degree angle, or the angle which moves up at one point per month from that 1974 time when it crosses that high price level. You can, also, find that time by subtracting the low price from the high price, and then counting over the resultant number of months from the low. The 1972 high is not on the chart, although the price level is indicated on the left hand margin of the chart.

The full square of that range comes out in March through April of 1979. April through March is 6 months from the last low, 12 months from a low, and 45 months from a low. This is a series of significant time cycles. You should look at this chart, as we have done with other monthly charts, and note how the fast moves last for 90 days or three months, 120 days or four months, and 180 days or six months. Also, note how tops and bottoms will come out 12 months from previous tops and bottoms, on the cycle of the years.

So that you can see this better, I would like you to help me on this chart. Please use, not only the counts which I have placed on the chart, but count out those other six and 12 month periods from lesser highs and lows, and place those on the chart. The March, 1977 high gives the March, 1978 low, and so on.

The next major range to square out, is from the April, 1979 high to the September, 1974 low, and this occurs in December of 1982. You expect a top to come in this month, except for one very important thing. Tops take time to form. Gann pointed out that "pitch" or momentum will overcome resistance, and this range squaring out, is resistance in time. So, there has been no time for a top to form in December of 1982, and time must be allowed for distribution. Price is rising above fast angles. Look at all of the tops on the chart, and you will see this. It would be unusual, indeed, if this stock was to reverse and move down in a high momentum move up- even with this range squaring out.

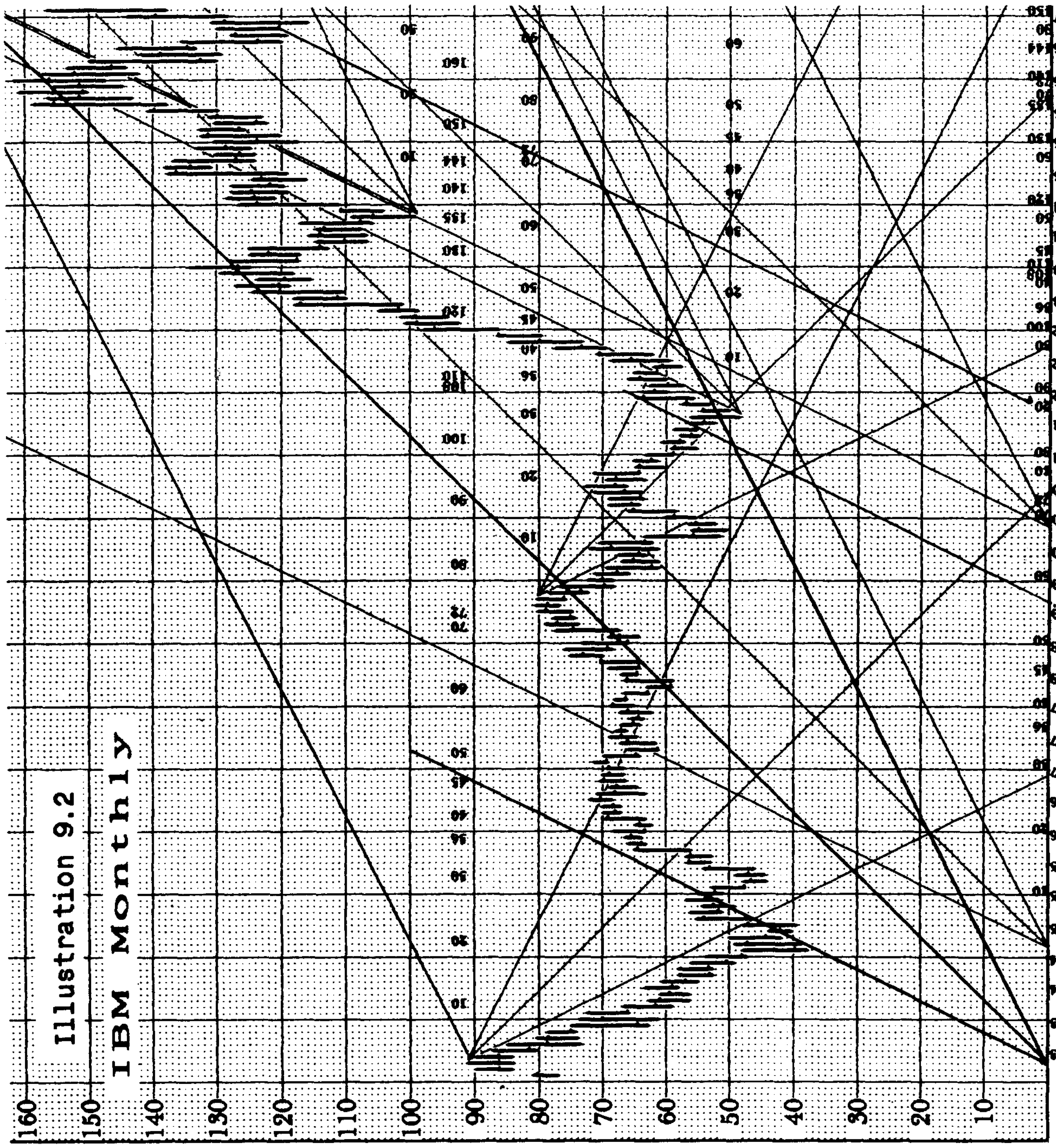


Illustration 9.2
IBM Monthly

Now look at the IBM weekly charts (Illustration 9.3 & 9.4). At what point would you start using the counts from the square of 52? The first point to start from is the low of 10/30/81, and you would use it from the date of the start of the drive down on 6/11/82. Others are the high on 10/14/83, the lower high on 1/6/84, and the final high before the 7 week blow off move is on 5/4/84, as well as, the low of 6/22/84, 10/12/84, and 12/14/84, etc.

The counts from the square of 52 are the calendar day counts of three months, which is 13 weeks or 90 days, and 26 weeks, 39 weeks, and finally, the full cyclical move of 52 weeks or 360 degrees of the yearly circle. You would look for evidence during those turning points to position for trades, such as having other cycles expire and ranges square out, and the position of price in relation to previous highs and lows, and angles.

Notice, when the drive began in June of 1982, that the first consolidation or sideways move was during October, and the second was January to February. The low of that second consolidation stayed well above the high of the previous consolidation. This is a sign of strength. Then in July of 1983, price moves sideways, but there is no space between this move and the latest consolidation before that. In August, price dips back into that price level, a bearish implication. Here, price went down for five weeks, which is the longest correction in time, and 12 points, the deepest correction in price. This is an overbalance of price and time. It is an indication that the drive up has a good probability of being top. As there was a reasonable amount of sideways price action during July and August, the probability of a spike high being formed by the resultant move up is increased.

As price is driving up in September of 1983, you are asking yourself what the ideal time for a top would be. The end of October is the expiration of a two year cycle. Ninety days from the early May low was the August low, and if this drive is an acceleration up, we might look for high around the 49 calendar day time frame, plus or minus three days from the August low. So, the top would be possible in the time frame of October 14th to 28th.

You would look for evidence of top in that time frame. If you look back to the monthly chart, you will see that the range from the October, 1981 low squares out with the November, 1980 high, and this puts this late October time frame within a few days of a three year cycle. In the week of 9/30, price reverses, but the 2X1 angle up from the August low is broken, and the time period is not yet up. The cycles are not there to support this week as top, and price is still in a strong position. In the week of 10/14, price reverses again, and this is in the time frame for top. A break of that 2X1 angle up from the August low would mean that this drive is, at least temporarily over, and could indicate a change in trend due to previous price action. The week after 10/14/83, the 2X1 angle is at 131, and if broken, it would be a level to go short, although a more certain level would be the low of the previous week at 130 3/4. This occurs, and the drive down begins.

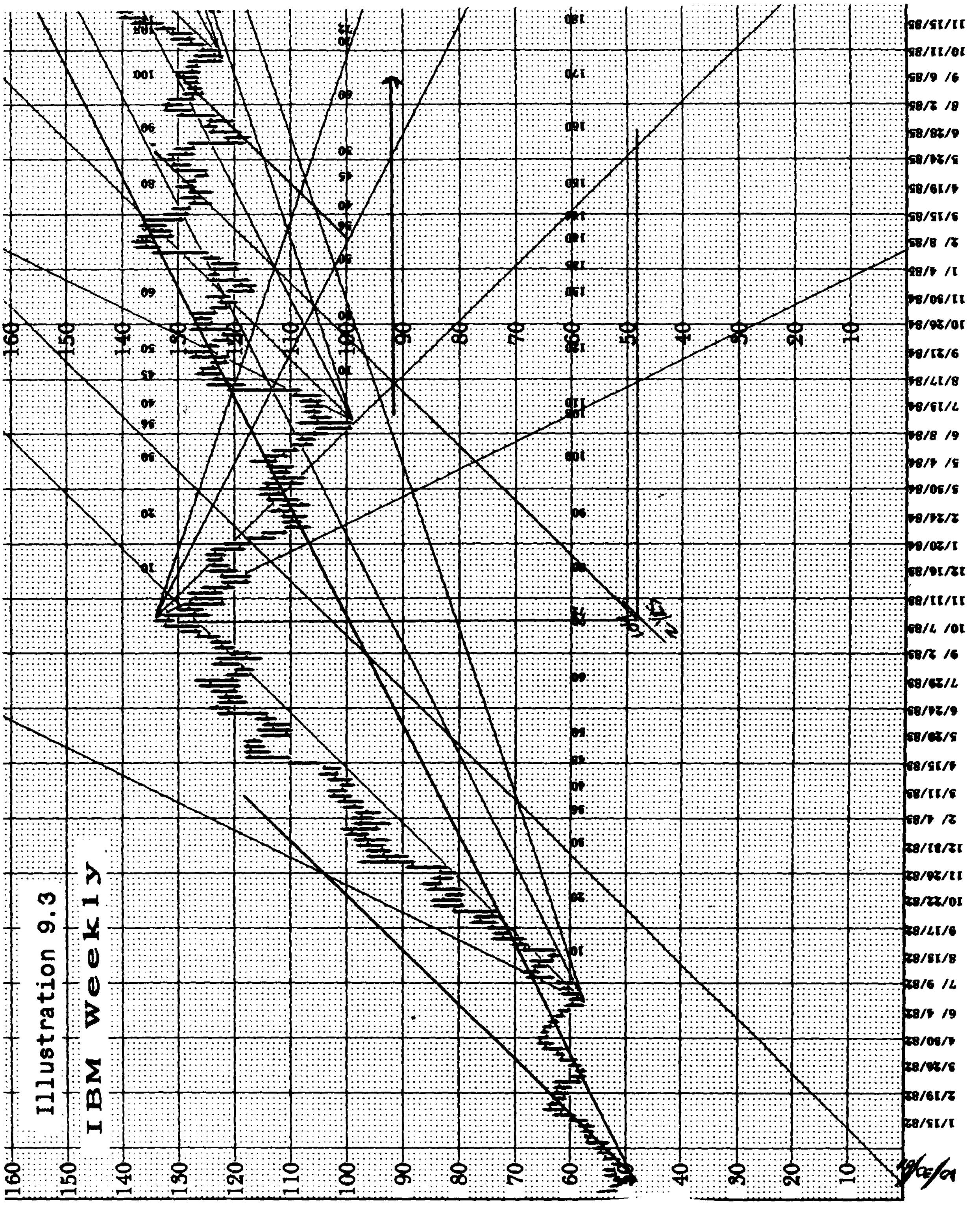
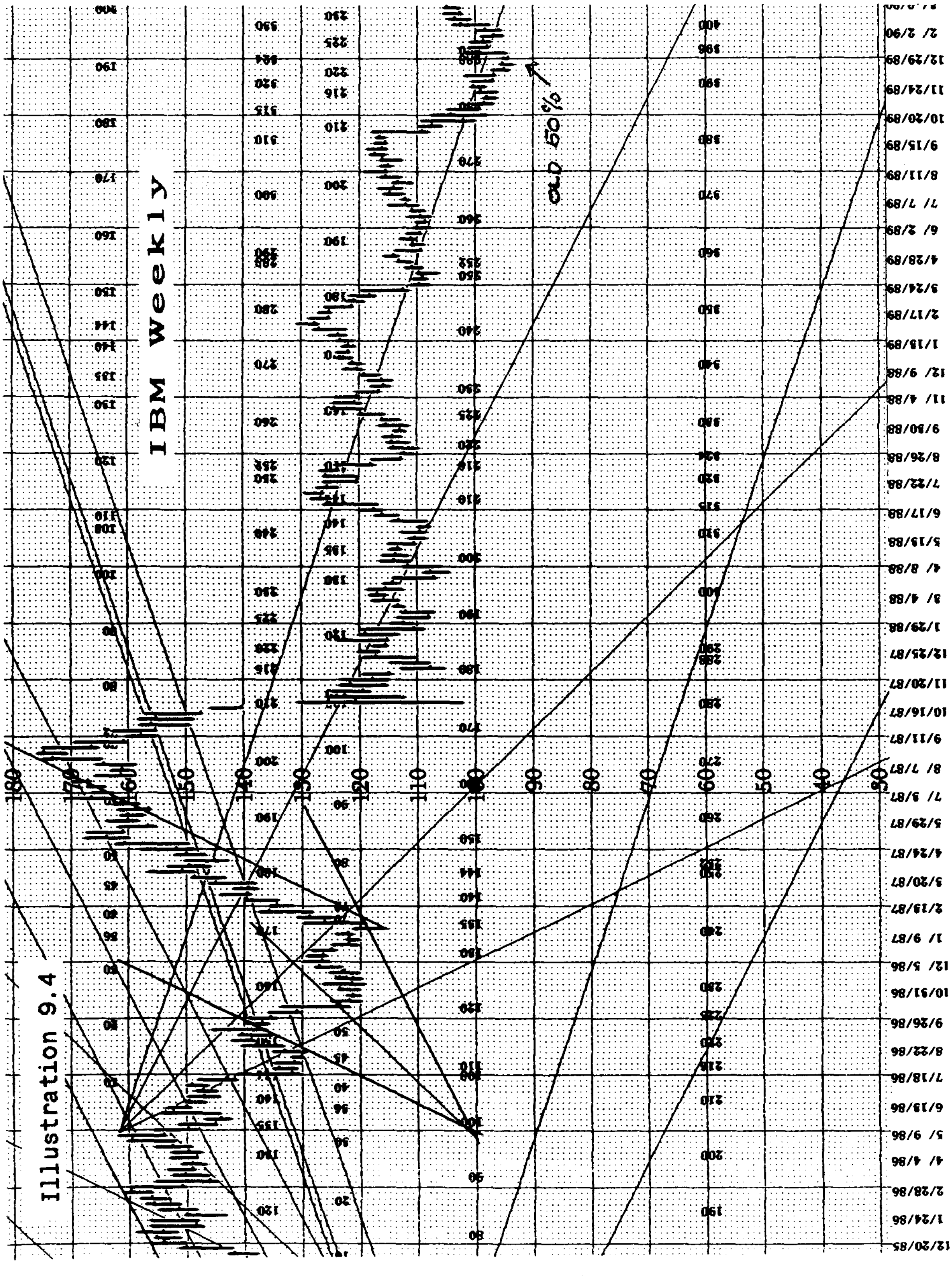


Illustration 9.3
IBM Weekly


IBM Weekly
Illustration 9.4
OLD 50%

How long will this drive last? First, the normal correction, a 90 day move against a bull trend would be obvious. This is followed by, 120 days (that would put the trend in doubt), 180 days, 270 days, then 315 days (45 less than a full year), and one full year or October of 1984, would be times to look for the down move to end. These would be counted from the high. From the June, 1982 low, two years would be June of 1984. October, 1984 is three years from the October, 1981 low. Five years from the April, 1979 high is April, 1984, but the very significant range of movement from the 1979 high to the 1981 low, squares out on the monthly charts in June of 1984. That would be a key time period.

Having located June of 1984 as a turning point month, look at the weekly chart and notice the head and shoulders topping pattern from July through December of 1983. The standard technical measurement for a price objective to a head and shoulders pattern is to measure the distance from the high, down to the neckline of the pattern, and then subtract that distance in price from the level of the neckline. In this instance, it yields a target price of 97 to 98. Of course, to a Gann analyst, the objective is given by the last swing range, which, in this case is 99, for the objective. This 100 percent of the distance from the high to the first low made in the drive down, is subtracted from that low.

I have drawn a square of the range on the weekly chart. If you will follow the 45 degree angle down from the high, you will notice that the angle moves at 1 point per week. You will see that when that angle hits the price level of 57 1/2, time has squared the range from where the bull move started. When that angle hits 48 1/2, the full range of the movement is squared. Fifty percent of those same squares of ranges is $91 and $95 in price.

If you will look at the week of 6/15/84, which is during the monthly turning point time frame, you will see that the low was exactly on that angle down from top, which is a squaring of price and time on the weekly chart. Gann said that every time price and time were in this fashion, that a change was possible. The only time this crossing of the angle down works with any reasonable accuracy, is when price and time are squared exactly. In this case, the low was exactly on the angle. It is under these circumstances, you can look for change. The exact high must be on the angle up from a low, or the exact low on the angle down from the high. This only applies to 45 degree angles.

Besides the objectives of swing ranges, head and shoulders targets, and the monthly turning point, what other reasons were there to look for a bottom in that point in time? One thing to look for is a seven week move into a time frame of change. You will notice that the move into top lasted for seven weeks in October, and the low in mid June shows a similar move down. Price, on the monthly chart, came down to the 2X1 angle from zero, at this same time. Here, is an instance of support being shown on a fast angle, and when this occurs, you can look for a fast move to follow. If bottom is found in this time, it would be above fifty percent of the range and leave the stock in a very strong position.

The move down was an obvious five wave move, completing an Elliott wave movement, and when price took out the 2X1 angle down, on the weekly chart, from the 5/4/84 high, it was a good indication that the move down was over. When the 1X2, or slow moving angle down from the October high, was broken, this all but confirmed that the stock was in an up trend.

How much of a move in time could we expect? Since the stock is starting the move up from a strong position, we could assume a drive up of 90 days, or 90 degrees, of the cycle year. That would be the first assumption. The second is to look for change in 120 days, then 180 days or 26 weeks, and finally, a full year, or 360 days. The 360 day or degree cycle from the October, 1983 high is October 12, 1984.

On the thirteenth week from bottom, 9/21/84, a reversal week is shown with a high on the 90 day cycle. This reversal combined with the break of the 2X1 angle from the low, and sufficient evidence is there to close out long trading positions. We know that three weeks is the normal correction, and this would come into play with the full year turning point from the October high. A bottom is found on that turning point or cycle, but price and time have overbalanced, and a weekly low is broken. This puts the move up in question. The setup is strong enough to play from the long side, but the bull trend is in question, and you would play it lightly and carefully. For four weeks, resistance is shown at 128, and then an outside reversal week down occurs. With that kind of evidence, you would be out of any long positions.

A valid turning point could be 180 calendar days from the June, 1984 low. Price moves down to the level of the May, 1984 high. IBM, then, moves to new highs in seven weeks, which is, also, 33 weeks or 225 calendar days from the low. The square of the range from the June 22nd, 1984 low, to the October, 1983 high comes out in the week of 3/1/85. That square can be found by following the 45 degree angle up from the low in June, to the price of 134 1/4, which is the level of the October high. Price moves up into this week, and is below the recent high. This would be the week to go against the bull move. Besides the range squaring, price action is bearish, and reversal week occurred after the seven week move into high. This is not the type of price action which takes out old highs and then continues up. That occurs on extreme momentum.

Another seven week move into a low occurred from the top week. The low hit on the week of 6/21/85 is 360 degrees or 52 weeks from the June, 1984 low, and within a few days of 180 degrees from the December low. Notice the important square of the range from the February, 1985 high to the June,1984 low. Price moved down to fifty percent of this range in price at the time of fifty percent of the range, and the price and time setup occurred. This is usually a good setup, and I have drawn a part of the square on the weekly chart.

October of 1985 was four years from a significant low, and two years from the high of the resulting bull trend. This is an anniversary, and it is a time to look for change or a fast move to begin. Price, on the weekly chart, shows a sideways move into that time frame, with a sharp drop followed by two inside weeks. The trading assumption is to go with the direction of the price move out of the consolidation, because the cycle of years is indicating a fast move is likely to start. In the week of 10/18/85, price moves above the 1X2 angle down from the August 2nd high, and is the first indication that the trend is over, and that a move up could be starting. A confirmation of this would be for price to exceed the high of the week. It does that the next week, but the close of the week is low in the range. Price does stay above the 45 degree angle from where the drive began, and thus, is still in a strong position. When the next week shows strength in the close (11/1/85), you could begin looking for an entry into a long position, if the high of that week was taken out.

On the daily chart, you can see that the move is a strong one giving exact support on the daily angle on the 7th and 8th of November, with only one day correction. On December 2nd, price breaks that support angle. This break needs to be confirmed on the daily chart by the next day's action. It takes out the low of the 2nd, which is not done in any decisive fashion on the 3rd, and 4th. Price recovers that angle indicating higher prices. This is the type of break and recovery of a daily angle that in a bull trend can cause an acceleration, and IBM, now, follows a faster angle from that low upward.

Now the question would be, when should you look for a top? Because price has moved up past the 60 calendar day cycle, the probable time for a top would be 90 calendar days. That is a high probability because this is accelerated move up and this type of move is almost always ended within the 90th to 99th calendar day from the low that starts the move. On the 96th calendar day from the low, IBM is, also, 330 calendar days from a top, and on that day price shows an outside reversal day down, breaking the support angle for the move up and closing below it, after a three day move up from the last correction. That previous correction, which started on 12/20/85, exceeded in price the previous daily corrections- although not in time. In any event, it is the time to exit any long position. The next rally lasts for three days and fails to reach the previous high, which is a bearish movement.

Remember that you can use the calendar day cycle counts as possible turning points. With that understanding of price movement, you can qualify whether to position on those turning points. View the calendar day cycles of 30, 45, 60, and 90 days as completions of movements. Note that 90 days from the top in May of 1986, points to a completion of the move down in early August in the same fashion that 90 days from the late September low of 1985 pointed to December of 1985.

I mentioned, earlier, that the square of the range is an excellent tool for judging turning points during consolidations on weekly charts. Look at the weekly chart and the dates of 7/26/85 for a high, 10/11/85 for a low, 5/2/86 for a high, and others.

S&P 500

We will continue to look at how to determine daily turning points with the S&P daily charts (Supplemental materials). What we are ultimately looking for, here, is a date that shows a conjunction of counts and divisions of ranges. This type of situation, when it arises, works best when price is moving sideways. When strong pitch, or momentum in a stock or index, as in this case occurs, very few good turning points develop.

Note on the S&P daily chart that on the initial drive up from the September, 1985 bottom, price never broke a swing low until December 23rd. Until that week, the largest correction in time was three days down. Notice, this drive up started at the beginning of the fall season, and had it's first consolidation at the beginning of winter.

When the market or a stock has a sideways movement, as the S&P cash did in December and January, you should pay attention to all 30, 45, 60, 90 calendar day counts from all swing highs and lows during the sideways movement. If the stock or market is not showing a great deal of momentum, or appears to be in a consolidation, these cycles can be significant trading opportunities.

December 24th, 1985 was 90 calendar days from the September low. This third day was the low of the first overbalancing of price and time during the move up. This makes the next rally shortable. Price moved down for 11 days after the high on January 8th. The eleven day count, the smallest division of 90 which we use, is a good time to look at change. In this particular instance, it is 30 calendar days from the December low, or a portion of the 90 calendar day cycle. Finally, from the spike down on the 7th and 8th, the square of the range of that move comes on the 23rd.

At that point on the chart, or the evening of the January 22nd, you would ask yourself, "What would this chart look like if a bottom was found tomorrow, or the next day?" January 22nd, was a large range down and closed on a low, and a reversal day the following day would indicate a possible selling climax. That type of situation is typical of bull markets. If, at this point, price were to move above 206, it could indicate a two wave move down, or an Elliott A-B-C correction. Again, this is typical bull market action during corrections. Notice that the lows for days up from the 1/23 bottom are above a 4X1 angle, and price is showing a strong acceleration.

These little one day selling climaxes, such as the one which occurred on the 22nd, are good, trading buy signals when used with other evidence. These appear as a large range down and a close at, or very near, the low for the day, and then the next day a reversal closing at, or near, the highs. We had this situation on 2/20, 3/5, 3/24, and on 4/7.

On this chart, you can see that in the run up from January, the corrections are one day, again, one day, three days, one day, and last five days. The idea is to look at the average correction in price against the trend in terms of both price and time. When you see that the latest correction is longer in those two dimensions then, as Gann said, "the trend is changing." That means just what it says. It does not mean the move is over. It means that it is closer to it's end. Of course, this is more important on the weekly chart than on the daily.

From the bottom in January, price has a fast move going, and on the 90th calendar day from the start of that move up, a good top comes in after the largest overbalance of price and time that has, yet, occurred in the drive up. The resulting sell off takes price down for an even greater amount in both price and time.

Back to the turning points. The 1X1 angle from the January 23rd bottom hits the price level of the January 7th top, on February 27th to 28th. You would expect a turning point here, but price is moving with good momentum, and time is not in favor of a strong correction either.

The 2X1 angle down from the February 28th top, intersects the price level on the January 23rd bottom on April 8th, forming a large triangle. When a symmetry of angle develops, such as this, it is usually a valid turning point. April 7th is a 22 day count from the March 5th bottom (in trading days). Also, note that on the 7th of April there is a 180 trading day count from the July, 1985 top, and that the 8th is 90 calendar days from the January high.

Notice, the 90 calendar day count from the January high could be taken from either the 7th or 8th, the seventh being the day of the high close, while price made a higher high on the 8th. In a situation such as this, I start my counts from the day of the highest price. Occasionally, this cycle can expire on the 88th day, but that usually occurs during a low momentum movement.

So, from the top in January, notice that the 90 calendar day cycle expires on April 8th, one day off bottom, and then the 90 market day cycle on May 16, on bottom. In addition, note that the 90 calendar day cycle from the January bottom comes in on April 23rd, while the trading or market day count is on June 3rd. So, the counts in and of themselves are indications, but when confirmed by the squares of ranges and partial squares (such as fifty percent of a full square), they become much more powerful.

Notice on the 20th and 21st of May that there are three divisions of ranges or squares showing, the 1X1 angle from the 3/27 top hitting the price of 222 from where the drive started on 3/5. This square indicates May 20th as a turning point. The 2X1 angle down from the 4/22 high hits the 226 price level, again, on the 20th. The 2X1 angle up from bottom on 5/2 hits the high of 245 1/2 on that date, as well.

So, you know that there is a likely turning point here, with a 90 market day cycle and three squares, or division of squares coming out. As price moves into that time, you would looking for the price action to yield a clue to direction coming out of the turning point. On Friday, the 16th (90 day cycle), price closes down through the last support angle, the 1X2 from the 4/7 low. The next day is an inside day, indicative of price support in the market, and the low, from the day on which price broke the support angle, is not exceeded.

Now, the setup looks good, but what would generate a buy signal? There is a live angle here, the 45 down from the high on April 22nd, which has been tested twice in the move down. Price rising above that resistance angle would be bullish. This occurs on the 20th. Another indication is for price to rise above the 1X2 angle from the April 7th low, which was broken by the move down on the 16th. If price does this, it could indicate a false break down, and price, also, moves above that angle on the 20th. By now you should be looking for a long entry position, using the low of the 16th as a protective stop for a high risk position. One method of entry would be to assume that, if a fast move is to occur, and this is a fast moving market, the 2X1 angle up will provide support. Price shows support on that angle on the 21st, but closes on the low for the day, and on the 22nd, breaks, and then quickly recovers that angle. Buy.

How long do you hold this position? The move up on the 22nd is a strong one, and in the last strong move up, price did not reach top until eleven trading days after the bottom. That would have give June 6th as top. The move up from the March 4th bottom, lasted for a longer period of time, but had begun to show resistance by the eleventh trading day. One day before the 6th of June, is 45 trading days from the March 27th high, and the 6th is 90 trading days from the January bottom. You would be expecting to exit the position by that time period, if the choppiness of the market was to continue. By the 27th of May, you know that price is in the fast acceleration up, and you might draw a 4X1 angle up from the start of that acceleration on the 22nd to see if it would provide support to the move. A break of that fast angle would be an indication that the acceleration was over.

On the 30th of May, price has it's first lower daily close in five trading days, but still shows a higher low price than the previous day. If price opens at this same level on the 2nd of June, it will have to accelerate up to maintain the momentum of the move(which has not taken out a daily low since it started). This is the time frame to be watching for a change, and on the 2nd, price opens slightly higher, but does not accelerate, and then takes out the daily low for the 30th and the 4X1 angle up from the low. (Are you out yet?) Price, then, takes out the low of the 29th and 28th, and you know that the move up is at least temporarily over.

There is a bit of analysis which applies to all charts, and some misinformation has been disseminated regarding this analysis. I have heard it taught that you should look for a change in trend at the point of two angles intersecting. This is NOT true! There are two occurrences when two angles intersect, which can be used, but it is not true for all occurrences of angular intersection. First, it can occur from double tops, or triple tops or bottoms, when price forms a perfectly symmetrical triangle between two angles. Preferably, both are 45 degree angles. And, second, when the angles cross at a significant price level.

You can see two angles intersecting on the S&P daily chart on July 18th, at a price of $232. The fact that these angles intersect at this price level means nothing, but the fact that they cross the price level of a previous significant bottom, does make that date important.

Recalling the discussion of the month of January, 1986, from the daily chart, alone, this period of time appeared important as a trading opportunity. However, the movement you would expect from a valid daily turning point would be a three day move at a minimum. Unless that turning point was supported by some other evidence, such as a longer term cycle, you would not necessarily believe that it would be the start of a longer term drive.

Now look at the weekly S&P chart (Supplemental materials). The range of movement from July, 1984 to July of 1985, was approximately 49 points, and fifty percent of that range in time would be 24.5 weeks, or a turning point that can be found by counting over 24.5 weeks from high. Also, you can follow the 2X1 angle down from the July, 1985 high, to the point where it crosses the 147 price level, which indicates the same time. This date, the week of 1/10/86, is fifty percent of that price range in time, or fifty percent of the square, and is, therefore, a week to look for change. From the weekly chart you would move to the daily chart, looking for the exact day within the week to expect a change.

From that high point during the week of 1/10/86, price moves down quickly, for three weeks. The week of the 22nd to 23rd date, shows a 26 week count which is reflected on the daily charts by the 180 day count. It is, also, the full square of the range from September, 1985 low to the July, 1985 high, and from the weekly charts, once again, a time to look for change. Three weeks down into a full square of a range and a 26 week cycle count, would be an excellent place to look for a good turning point, as well as, a fast move to start. A long trade is to go with the trend.

As you can see, the weekly charts will present some powerful trading opportunities, and can give you far better knowledge of the market, and how it relates to the historical action, than a daily chart.

So, using this chart, the weeks of 1/10/86 and 1/24/86 were determined to be important weeks. The range from the July, 1985 high, to the July, 1984 low, has now worked once at fifty percent in time for high. the full square of that same range can be found by following the 45 degree angle or 1X1 angle down to price level of the low, and you will notice this gives us the week of 7/4/86, which is, also, 22 weeks from the January 24th low. Eleven weeks from that low was a good turning point bottom. You notice, from the weekly chart, that this week of July 4th, 1986 is 101 weeks from the July, 1984 low, 90 weeks from the October, 1984 low, and 67 weeks from the March, 1985 low.

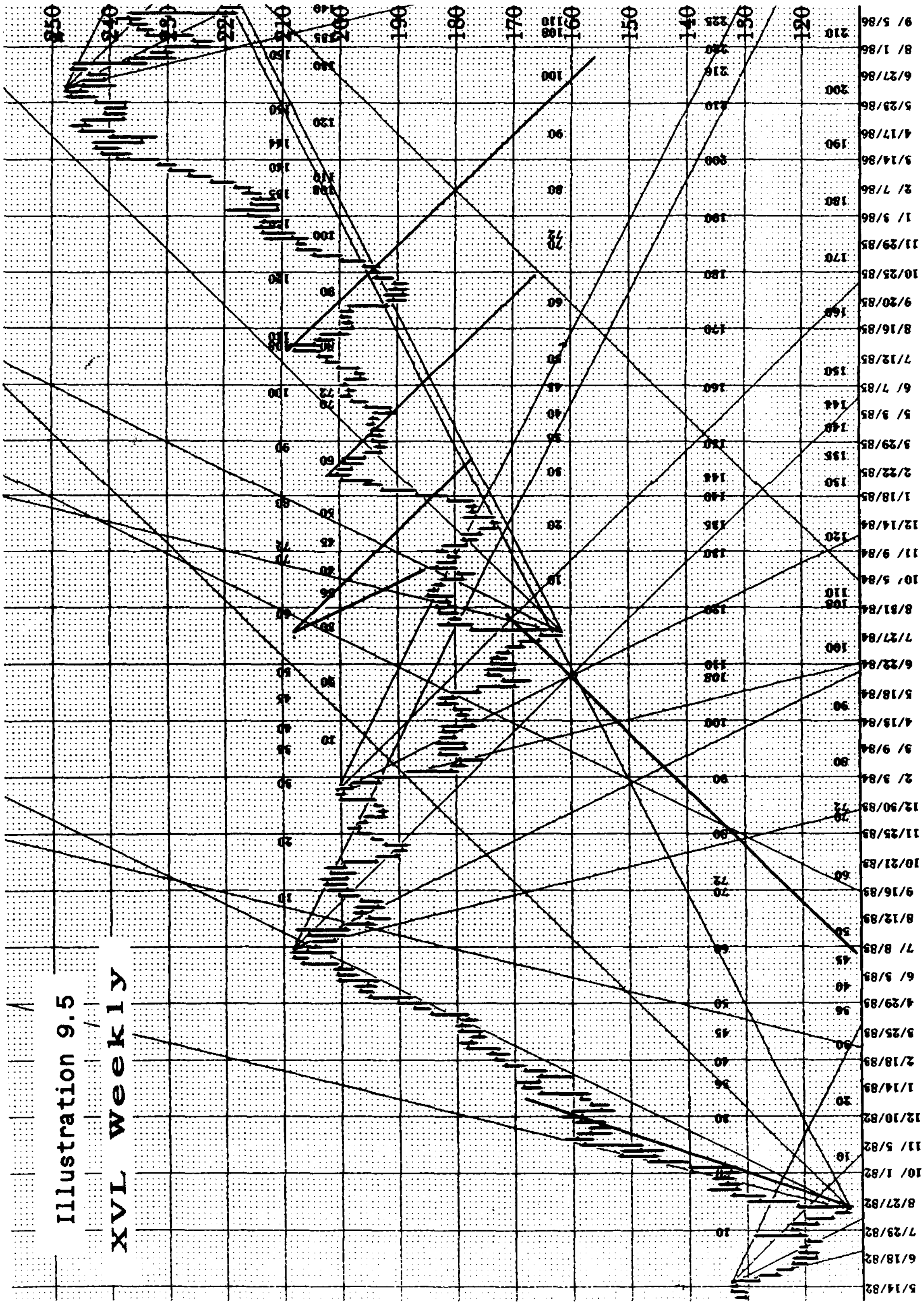


Illustration 9.5
XVL Weekly

Look back at the Value Line weekly chart (Illustration 9.5). You will see that, although it has different price levels, the range from the July, 1985 high to the low in 1982, has a 50 percent mark in this same week of 7/4/86. Furthermore, it has 50 percent of the range from the January, 1986 high to the January, 1984 low, in this week. Obviously, this is all in hindsight to the reader, but to show how accurate these methods are, during the time period leading up to this week, I was expecting a top to form with the high in that week of July 4th. The evidence was there on both weekly indexes. The counts were the same, and the squares came out at the same time.

As this time period neared, the pattern on the S&P 500 was that of an upward tilting consolidation, which can be a bearish pattern. So, from the S&P weekly chart, with the range coming out in the week of July 4th, 1986, you would go to the daily chart in order to determine when to place the trade. Price moves up into the week, showing the bearish ascending triangle, which comes to it's apex in the first day of July. On the second, price breaks slightly through the upper line from high to high, on the daily chart.

Look at the setup for the July 2nd high. The 2X1 angle down from the May 30th top, crosses the price level of the April 7th low on the second, squaring that range. The 90 calendar day count from the April low, comes in on the third of July. One hundred and eighty days from the January high is the third of July. Time was, also, 45 to 52 calendar days from the May low, and this is the seven week "death zone" setup with multiple cycles expiring along with, the squaring of ranges. There was a series of counts lining up on this day from previous highs and lows, using the trading day counts from the square of 90. These were 112, 123, 33, and 11, all on the second and third. If you were looking at this week for a change, as I was at the time, these two days were the important ones.

One of the techniques that you can use on these charts, is to draw a trend line from high to high. Although it is not always accurate, it sometimes works well, as it did on this occasion. On the first of July, after the market had closed, I did this on my S&P weekly chart, using the high from the week of 4/25/86 and 5/30/86. This line crossed the week of 7/4/86 at a price of 253.20, or, there about. This was one of the resistance figures I used on the second of July. So, on July 2nd, there are definite signs for a change of price direction, and the advance is becoming labored, as is shown by the small range. But, because I wanted to play this as safely as possible, I did not position on the second. I wanted the market to give a sign of weakness. On the third, price moved below the low of the day before, which was the first time this had happened in nine trading days. When that low was taken out, I put on my short positions.

The Value Line, at this time, was showing a possible lower triple top, which was a bearish sign, and as this is a broad market index, it affords a better view of the overall market than the more selective indexes.

From this, you can see how the techniques work together. I use this same technique on the daily and weekly charts of a large number of stocks. This helps to clarify turning points for the markets. When 60 or 70 stocks point to the same date, I know this is a valid turning point. Nonetheless, it is difficult to judge the magnitude of the change. When all of this work indicates a change- the division of range, market day counts, calendar day counts on the indexes, divisions of range, and counts on individual stocks- there is a great probability of change in the short term trend, or a reversal of price movement. I usually make the assumption that the reversal will be of no greater magnitude than previous reversals in the current drive. You should measure all sell offs, on the S & P daily chart since 1985, and prove to yourself, the value of this knowledge.

VALUE LINE (XVL)

Now, let's go back to the Value Line weekly chart to study the angles, cycles, and squares. (Illustration 9.5)

The first angle rising from the August, 1982 bottom is a 4X1 angle. Price rising above that angle means that the market is in a very strong position. Once penetrated, the 3X1 angle would be the next support, then the 2X1, which gave support the week of 1/28/83. So, breaking angles that rise at a greater rate than a 2X1, on a weekly chart, does not mean a change in trend. Price can actually rise into those angles for support, and, in fact, a market or stock in such a strong position (or what we would refer to as showing exceptionally strong momentum), is almost always going to show support and an acceleration on the 2X1 angle up.

When a market or stock is in a very strong position, and moves into a 2X1 angle on a weekly chart, you can look at the daily chart and buy from a double bottom, a rising bottom situation, or any low on the angle.

Again, on the Value Line weekly, once the 2X1 is broken, you can look to the position when price reaches the 1X1 or 45 degree angle. This will give you an idea of the risk in holding long positions at the time price meets that angle. The higher the price level up from the low- that a 2X1 or a 1X1 is broken- the more probable is a fast bear move to follow. Once a 45 degree angle from the low or start of the drive up is broken, then the trend will have changed. The same statement is true of 45 degree angles from zero, which are even more significant to the overall trend.

The higher in price the stock or market rises, the more volatile price action becomes. On a daily chart, price will break and recover angles many times. One of the better trading signals is, when price breaks an angle and immediately recovers it. That is usually a very good buy signal as 4/15/83 or 7/27/84 or, as a sell sign, 1/20/84, on the Value Line weekly chart. An excellent filter that I have found for the break and recovery of angles is, in an up trend, using a weekly chart as an example, the price of the week after the break of the angle should not move below the low price of the week in which price broke through the angle. In a downtrend, the high of the week which breaks the angle is important. In volatile situations (assuming an up move), it is usually prudent to wait for the break of an angle, on a weekly chart, to be confirmed by the price closing on the low for that week. Also, you could watch to see if it develops some momentum downside, or breaks the low of the penetrating week, the following week, before changing any intermediate or long term strategy for a bull move.

The 1983 top, in the Value Line, came on the 45th week from the 1982 low, and on this chart, I have put the square of the range from that high to that low. Fifty percent of the range from the high to low in price is about 160, and in time, the 48th week from the high.

Again, in the 1983 market, price follows a 2X1 angle up, and when you see that happen on a weekly chart, you know that it is a strong bull move. Just buy it. Don't try to short it. Accelerated moves into tops like this one will show a pattern of each correction getting smaller and smaller in time and price, and finally, price will have a blow off move. So, any time you see that corrections are getting smaller and smaller in time and price, you will know that you have that situation on your hands. From the low, this market takes off like a shot, and moving into the 3X1 up for the first time, price breaks and recovers that angle on a weekly chart. The acceleration lasts for three weeks before support is, again, found on that angle.

After three Elliott waves up, a sideways A-B-C correction takes place, moving through the 3X1 angle. The sideways move, or consolidation breaks to new highs on the third time against 45 points up from the low. Price moves up from the second low of consolidation for three weeks, and then corrects back to the 2X1 angle. That angle shows good support, and the second leg of the drive up, starts from this point.

Price looses momentum up in the sixth week of the drive, and then passes through the 2X1, up. If you were basing your stop from the 2X1, and it was a close stop, you are now out of this drive. In the next week, price recovers that 2X1, up, and you had better get back in. This break and recovery of angles works exceptionally well with a trend, and is often where an acceleration during trend occurs. Price reaches top at 45 weeks from bottom, or 315 calendar days, a point which Gann said you could look for change. Price moves sideways through the 2X1 angle, and that angle is not recovered. An outside reversal week down occurs, and by now you are reasonably certain that trend has changed. You might not be short here, but you should be out of your long position.

Three months or 13 weeks from the high, price is up against the 1X2 down from top and shows resistance on that angle for four weeks. The resulting move down, finds support on the 1X1 down from the top, and moves up for three weeks into the 1X2, again. By now you are ready to short this market, having lower lows and lower highs. Price moves down for three weeks, and then shows support, and moves up breaking the 2X1 from a higher bottom. This move is a three week move, and moves slightly above the 1X3 angle from top. Now, there is a serious question to the bear view. The top week of 1/13/84 shows very little range, and the next week moves back down through the 1X3, and to the 45 degree angle up from the low of the week of 11/11/83. In the next week, that angle is broken, and the 2X1 from the top is recovered to the downside. This is a break and recovery of an angle in a bear trend.

Forty-five weeks from top is a lower top. The square of 90 in time from the bottom is working beautifully. Follow the 1X1 up from the date of the high and the level of the low in order to see where fifty percent of the range is in price and time. Fifty percent in time brings the end of a three week down move, and fifty percent in price, the bottom of this bear market. Because price is above the 45 down from top, and has passed 50 percent in time, you realize that the momentum of the move down has not been nearly as strong as that of the move up, and you might be looking to go long at fifty percent of the range when that price is reached. Of course, this is the level of the most significant consolidation of the move up during November and December of 1982.

Price breaks the 1X2 up from the low in the week of 7/27/84, moves down to nearly one point of the fifty percent area, and then recovers the 1X2 from the low. The next week shows support on that angle, and hopefully, from reaching the fifty percent level, you are out of your short positions and (possibly) into a high risk, long position, or a light long position. Notice how price moves on that 1X2 from the low on the rest of this chart.

The July, 1985 top came in on the week that the previous range of movement squared out. From the low in the week of 5/3/85, the 45 degree angle up crosses the level of the high in the week of 2/15/85 during the week of 7/26/85. Notice, price moved sideways for four weeks at a lower level, and then spiked down. That is the setup I've been talking about- with small range sideways movements, just after a run up to a high. That July high is, also 45 weeks from the 9/14/84 high, and one year from the low.

That sideways move setup is something that Gann talked about, but it comes at a spike top with big volume, which has no time for distribution. Distribution will come at a lower level, and when you see this setting up with small range weeks or days, in a sideways move below a spike top, and the price level of the low of that consolidation is broken on a big volume day, JUMP ON IT! It is a setup that you can trade every time. But, remember to look for the price break to come on a big volume day. Gann, often, used that setup in his trading.

Now, you will notice that from the July, 1985 top, to the August, 1982 bottom, fifty percent of the square from that price range in time, comes out in the first week of July, 1986. That week is 101 weeks (the square of 90) from the July,1984 bottom (two years on the monthly chart). It is, also, one year in months from the high (from the cycle of years). There were numerous reasons for you to expect change in that week in July, 1986.

Where do you start your counts from? From the bottom on August 13, 1982, after three weeks up, you would start the square of 90 counts and the cycle of year counts. Seeing that price was above steeply rising angles, and was, in September, holding above the previous swing high of May 1982, you would know the index was in a very strong position. When, in October, 1982 price broke out of a horizontal consolidation on wide range, heavy volume, and recovered an acutely rising angle, you should have been convinced of a strong bull market. Pitch, as Gann referred to as momentum, overcomes resistance of both price and time. So, when time moved into the eleventh week, or the 11 1/4 week, you should not anticipate much reaction due to the extreme pitch, as measured by the angles of the ascent. The same idea applies to other counts or time cycles, such as 13, 22, 26, 30, 33, 39, and 45, although you would be watching those times for some evidence of change, you would not expect it with the momentum that is being shown. One note or addition is, that as the move went further into time, the more you could expect a change.

This movement would have been positioned with protective stops, three to five points below the 2X1 angle. By July 15th or 29th, 1983, price had moved down decisively through the 2X1 angles after the 45 count and after being up over 90 points. So, you would begin counts from the top of 7/1/83. The next is 360 degrees, or days, or a full calendar day cycle. But, by that week of 8/12/83, price and time had overbalanced. In other words, the correction from the 45 week top had consumed more time and price points, than any previous correction. Once that had occurred, you could assume the counts from the top would be the more powerful cycle to work with.

Of course, swing highs and lows should be used, also, for counts. You will notice that from the low reached on the 52nd week from the bottom, 11 1/4 weeks in time gives the week of 9/16 through 9/23. During that period, price was showing resistance at the 1X2 angle down from top, and then the following week of 9/30 was an outside reversal week down. On my work charts, I run counts from the significant highs and lows for some length of time, while I use swing highs and lows for a shorter period.

Understanding the time cycles may appear difficult at first, but if you will view these on many charts, you will recognize the setups that you can safely trade from, given that time and work. With this in mind, let's take one more look at the cycle of the years, and the square of 90 cycles using the Value Line charts. Return to the Value Line weekly chart. If the daily chart of the Value Line included the 1983 top, you would see these same cycles terminating in the end of June, 1983, a 45 day blow off into a major time cycle. Twenty-six weeks from January 28th, 1983 low was 7/29/83, which was the next high after the top. Fifty-two weeks from the low is 8/12/83, and price accelerates down into that time. Even though the market is looking very bearish, at the time, you would be tempering your bearishness knowing that the one year cycle was due, and that many final stages of markets end with blow off types of moves where either sellers or buyers are exhausted. Thirteen weeks from the high or 90 calendar days is 9/30/83, and price struggles in a sideways move into that time frame. Remember, thirteen weeks will often end a blow off move, but it is, also, a turning point that can run from a high to high, or a low to low, and is not always a high to low and visa versa.

The low on 8/12/83 was 52 weeks from the August, 1982 low. The high hit on 7/29/83 is, also, a good place to start a cycle. Always check the first lower high and first higher low for cycles. So, from that 7/29 high, 13 weeks is the week of 10/28/83, and price is showing a high momentum move down. Remember that the 90 day cycle can terminate anywhere from 90 to 99 days, in extreme momentum. That is what happened in this case.

Now, look at the week of 9/5/86. Price was 52 weeks from the 9/6/85 the second, lower high from which a significant move started. Also, it was 13 weeks from the high on the Value Line, and 90 weeks from the 12/14/84 low. Price moved up into this week and by the end of it, the S&P had reversed down from a double top with a serious divergence in price on the Value Line.

Remember that Gann said that you could look for top on 45 weeks, which is 315 calendar days, or 45 calendar days short of a full year cycle. Ninety weeks is obviously twice the 45 week count, and 1/4 of the circle in weeks. This is 630 calendar days, or 90 days short of two full years. Time is the most important factor in this analysis, and these cycles are good measures for change in trend, and in most instances, can be qualified in advance. However, there are cases when the price action will fool you. Let's look at one of those instances.

In the week of January 10, 1986, price was up for 13 weeks, or 90 calendar days. It was two years, or 104 weeks from a high, and fifty percent of the range from the July, 1985 high to the July, 1984 low, came in that week. As to price action, the market breaks the 2X1 angle up from the low, with an outside reversal week. Price looks quite bearish, although on the monthly chart, price would still be in a very strong position. This price action, as well as the cycles, would be more than enough evidence to position a short trade during that week.

Of course, looking back at that period of time, you can see that a short trade was a failure, or at least not exceptional, and the filter you should use on an outside reversal day, week or month is to watch for price to trade below the low of that reversal. In this case, price did not do this, but even so, this type of action could cause you to be bearish. This is something you should avoid. Try not to become too bullish or too bearish at any stage of a market, as it will cloud your analysis with expectations.

The next series of cycles to come out after that week is the 26 week count from the July,1985 high during the week of January 24th, 1986, which, also, is 78 weeks (1 1/2 years) from the July, 1984 low, and a significant time period, particularly since 52 weeks from that low was the July, 1985 high, you could assume that this would be a strong cycle. In addition, time was 180 weeks.

Now look at the Value Line daily charts (Illustrations 9.6 & 9.7), during that time period of the week of January 24th, 1986. Price shows a triple bottom and then breaks up above the angle down from the high, confirming the support of the lows. From daily price action, and weekly cycles, you could assume that there was a good chance of a continuation of the bull trend, at a minimum, it was not a time to be bearish, and you should be out of any short positions you might have taken in the week of the 10th. Support is then shown on the support angles up on January 30th and 31st, indicating that the 26th week, 78th week, and the 180th day (same as 26 weeks) cycles could be the start of a move up, and possibly one of a multi-week nature. This move could last for 11, 13,22,or 26 weeks.

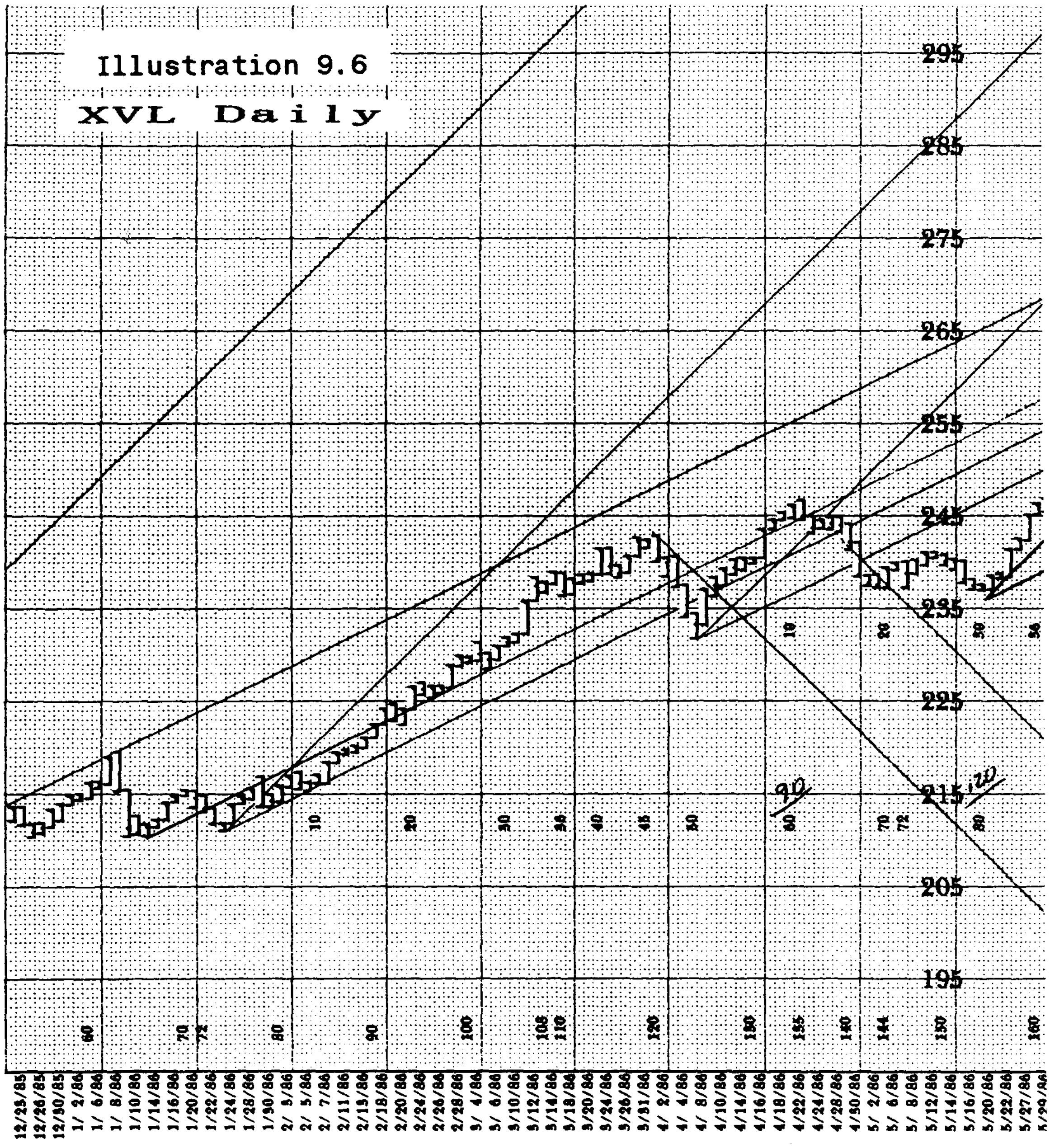
In a strong move, the first important cycle to look for a trend to reverse is the 30 calendar day cycle, especially in a move against the trend. The second is 60 days, and then 78 (11 weeks), and 90 calendar days.

For a look at a valid setup from the 30 day reversal cycle, look at the S&P daily chart. You will notice that 30 calendar days corresponds very closely with 22 market days. Thirty days from the low on 8/4/86 is 9/4/86, and price is at a double top in this time frame with the Value Line showing a lower high at the same time. The 2X1 angle running up from the August low on the S&P hits the price level of the previous high (in July) on the date of September 4th, and that 2X1 angle on this chart, with the half point scaling, is, actually, a 45 degree angle on a one point chart. This is the square range on the daily chart. Since the high on that day is almost exactly the same price as the high in July, price and time are squared on a 30 calendar day cycle, with a square of the range on the daily chart, and a possible double top. This is definitely a good setup for a reversal from that 30 day cycle.

Again the 11 week cycle is 78 3/4 calendar days, and is a cycle that can run from bottom to top or top to bottom. If this is to be the case, the turn will come very close to being on the 78th or 79th calendar day. Price action going into that time frame will make it obvious as to what the likelihood of a reversal is, at that time, just as with the 30 day example, above.

Price movement is important to judge the likelihood of a cycle being a reversal. I hope you will do your best to develop an understanding of what price action is indicating, any particular time. All successful traders have this knowledge. Go through charts, the Value Line weekly, and others. Look for the changes in trend that comes in on the 11th week, and you will see that if it is to be an important turning point, more often than not, there will be other cycles expiring. An example is the week of 6/24/83, the 315 day count, or 45 week cycle expires, and on 5/3/85, and early October, 1985- where a three year cycle expires (156 count).

The key to understanding the use of the cycles is to look for shorter cycles to expire at the same time as longer ones. The low in the week of 8/8/86 was 30 days from high, but 208 weeks from the low (4 years). The September high was 52 weeks from a second lower high and 90 weeks, or 630 days from a significant low.



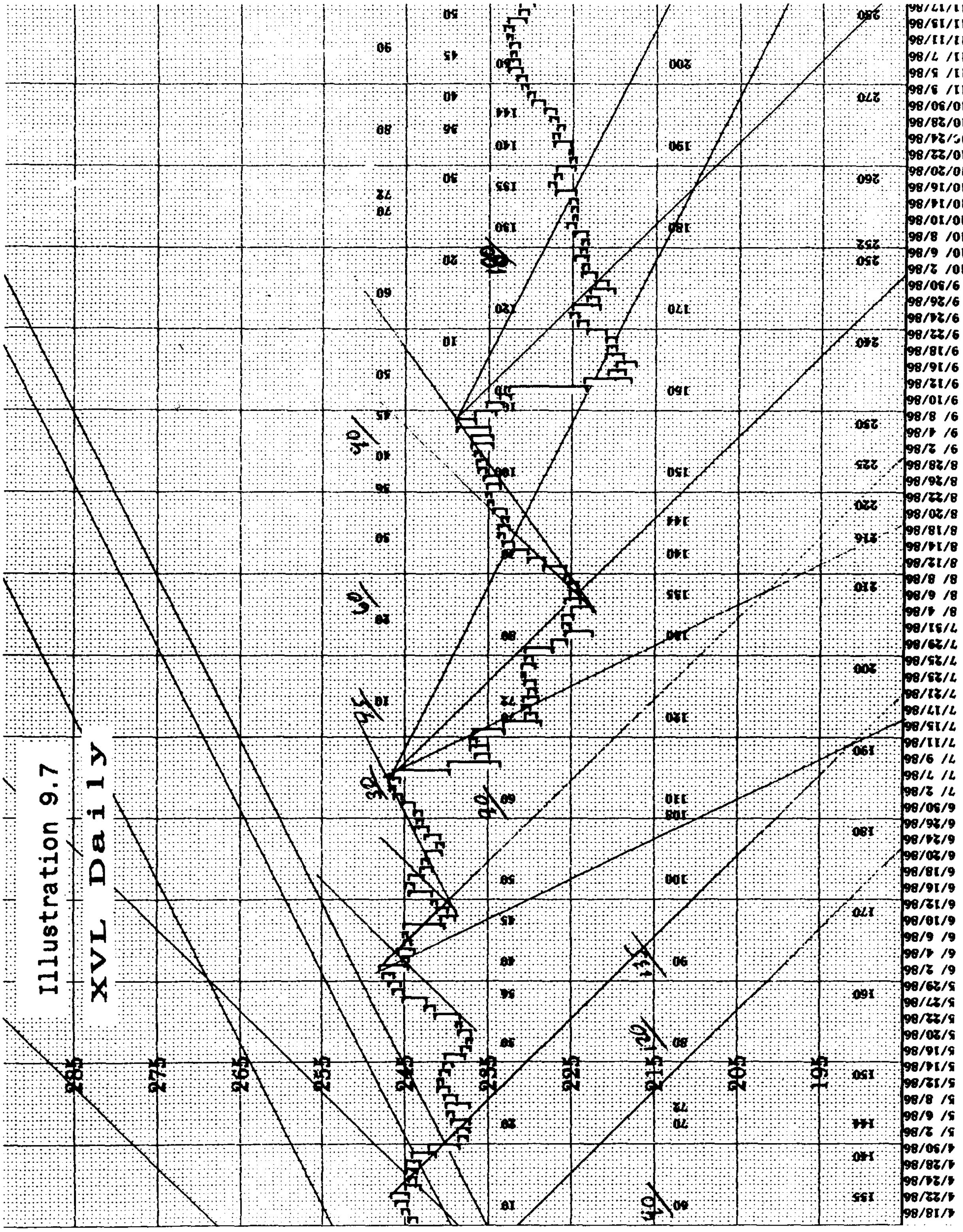


Illustration 9.7
XVL Daily

INTRADAY

In the supplemental materials, you will find an S & P 500 contract, half hour chart. When the market trends on an intraday basis, you'll notice close to the same countertrend time period counts. Another interesting occurance is the turns in the market that happens exactly on the half hour counts.

The reason for a .125 scale is so the square of 90 and 144 are valid. Moving ninety increments of .125 is the same as 11 1/4 points. And, forty-five increments is 5 5/8 points (1/16 of 90).

In hindsight, you will find many setups that appear as great trades. However, be warned- this is in hindsight. It is my opinion that you only look at your intraday charts when you have a plan from your daily charts. In the instance that I do not have a plan, I, then, plot the intraday charts after the close.

THE PLANETS AND GEOMETRIC VIBRATION

There has been a great deal of speculation regarding Mr. Gann's use of astrology in his trading. Although, he may have been a fan of it, his methods of trading had very little to do with traditional astrology, as such. His methods were purely mathematical and related to geometry. He believed that there was a natural order to movement in time and space (price). That natural order, can be seen through the study of the movements through out our solar system.

My research has found two very specific techniques used by Gann that related to planetary movement. The first, is to plot planets and planetary angles on a chart. Illustrations 10.0 through 10.3 are a weekly charts on the S&P 500, with Saturn and Neptune and 11 1/4 degree aspects. This appears complex, but it is actually quite simple. Notice Point (A). Jupiter, on that day, was at 203 degrees. For every 11 1/4 points or degrees, another parallel line is drawn. So, three lines up, would be 33 3/4 degree angle of Saturn. You can see the many highs and lows which show on these angles. Obviously, the theory behind such price action is that there is a natural order to price vibration on a correlation. However, that does not necessarily hold true for causation. Another intersection point, is price targets, which are moving targets, but can be qualified with time.

The second relationship of planetary movement to time, was simply to note where the planets were at specific market highs or lows, and to note returns of those planets to that position with the larger planets turning points, developed from movements of significant geometric proportions as 45 degree or 90 degrees. I have found it amazing, at times, to see the returns, or proportional returns, of five or six planets, all within the same thirty-six hour period. One interesting occurrence was with the stock market indices, on November 14, 1991. This date was the fifth return of Jupiter, in addition to the second return of Saturn.

The following list is the time it takes each planet to move 360 degrees, heliocentric:

PLANET	YEARS	DAYS
Mercury		88.97
Venus		224.70
Earth/Sun	1	365.26
Mars	1.88	686.98
Jupiter	11.86	4331.98
Saturn	29.46	10,760.60
Uranus	84.01	30,685.50
Neptune	167.79	61,285.25
Pluto	247.69	90,465.38

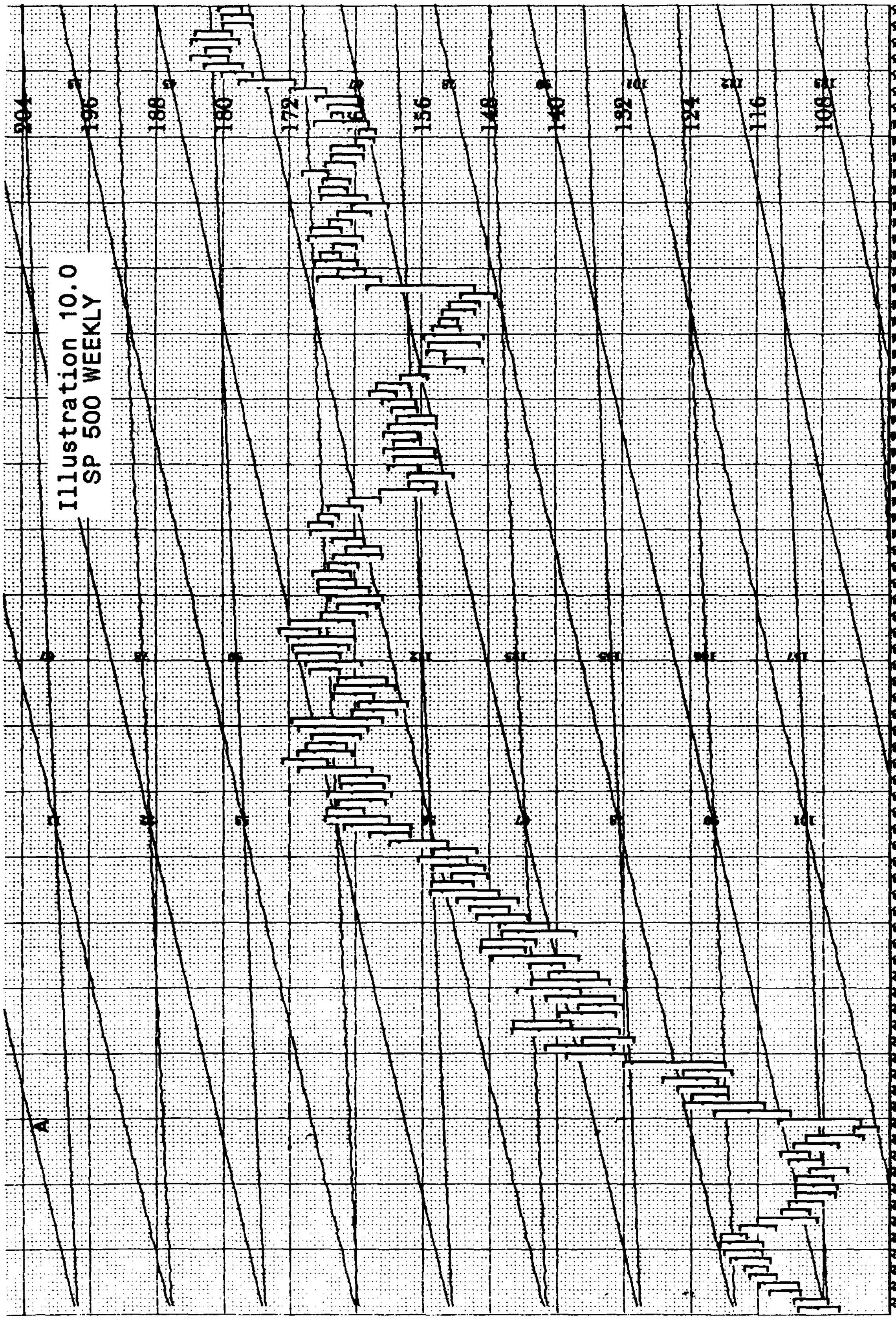


Illustration 10.0
SP 500 WEEKLY
204
196
188
180
172
156
148
140
132
124
116
108

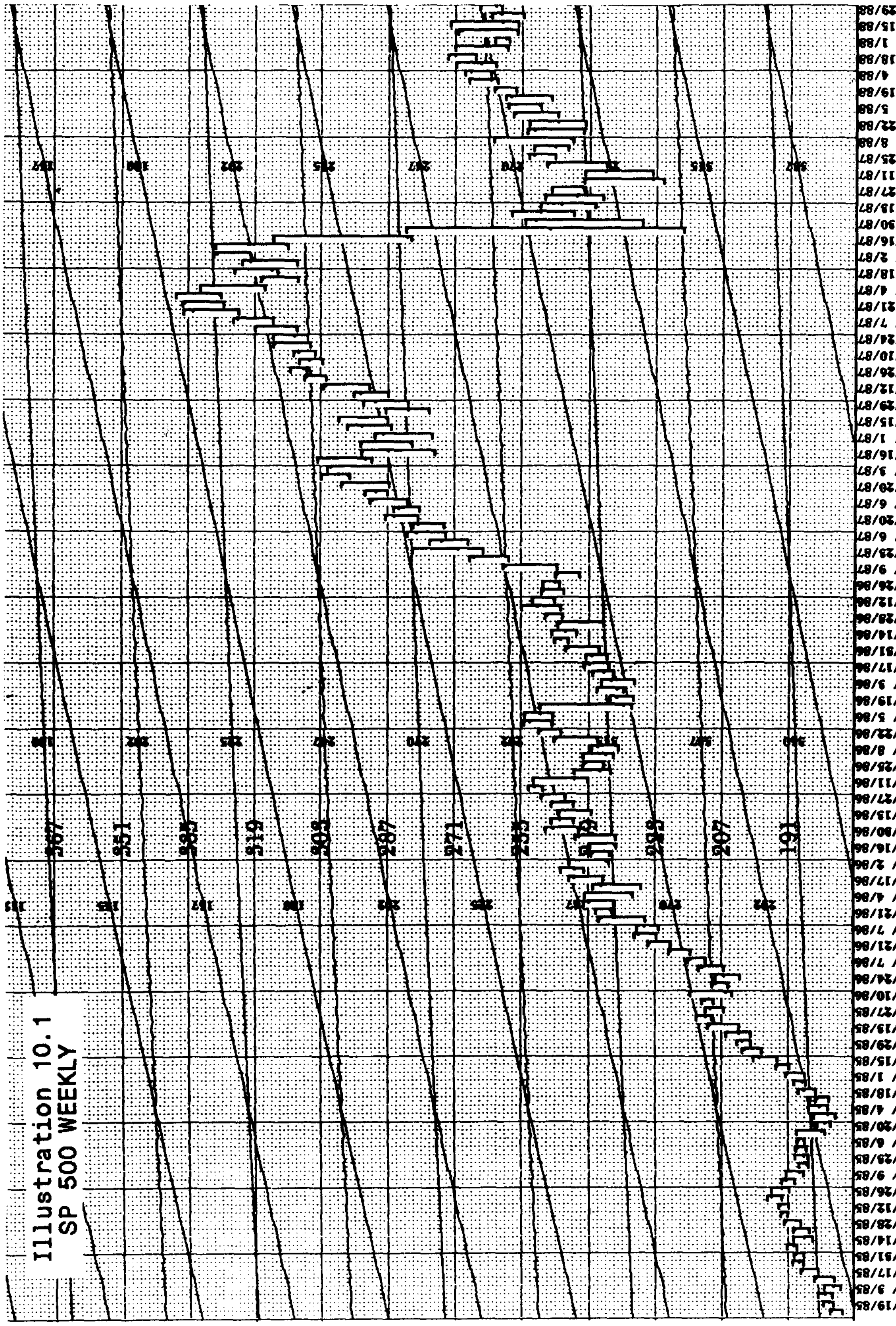


Illustration 10.1
SP 500 WEEKLY

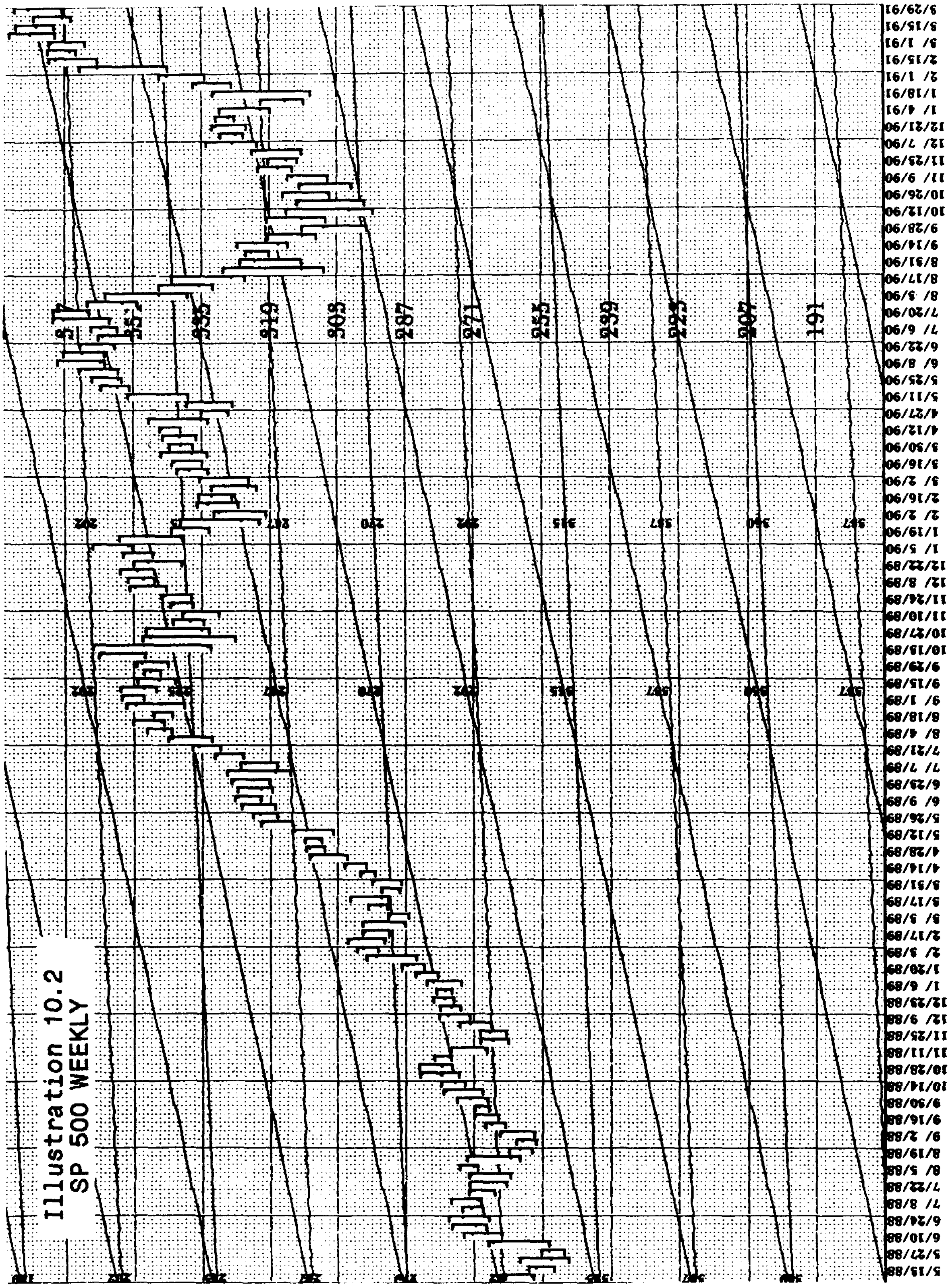


Illustration 10.2
SP 500 WEEKLY

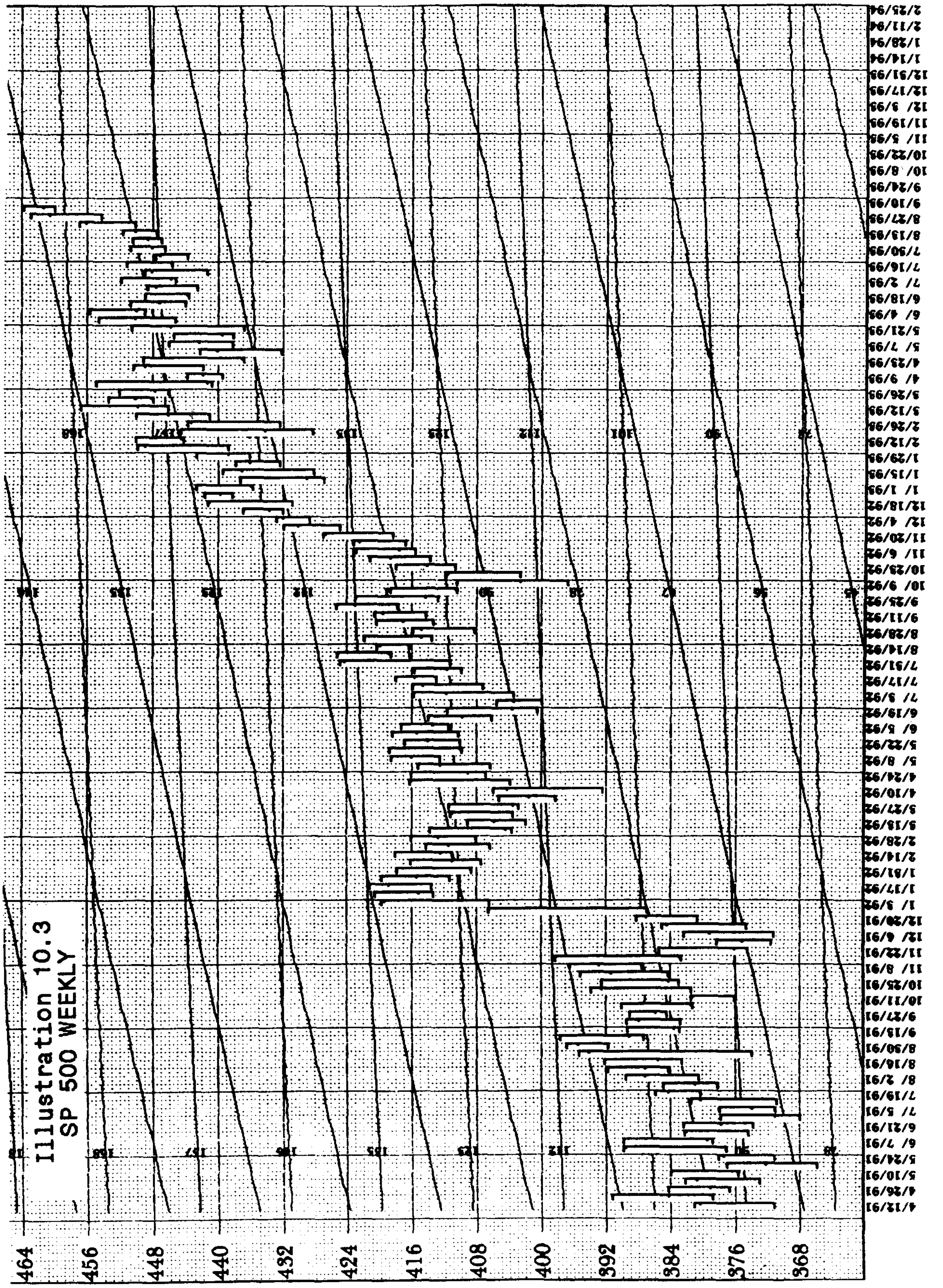


Illustration 10.3
SP 500 WEEKLY
464
456
448
440
432
424
416
408
400
392
384
376
368

The Earth/Sun cycle is a dominant cycle. Next in magnitude, is Saturn (30 years). Mr. Gann considered this, the seventh planet, to represent the key, long term cycle. The question, to use heliocentric or geocentric aspects was answered by Gann with the statement, "Use both!" I, first, use heliocentric as in the examples of the S&P 500 weekly chart.

The following is a letter Mr. Gann wrote in 1954, indicating the use of planetary cycles.

1931 April 16 to August 7, 1953
Mars has made 12 round trips.
1954 October 29
Mars will be opposite or 180 degrees from it's place on April 16, 1931.
1936 October 1 to September 19, 1953
Mars made 9 round trips of 360 degrees each.
1954 December 9
Mars will be 9 1/2 round trips or opposite it's place October 1, 1936.
1940 May 15 to June 12, 1953
Mars made 7 round trips or complex cycles.
1954 April 9
Mars is 7 1/2 cycles or opposite it's place on May 15, 1940

Due to the retrograde position of Mars, it will again be 7 1/2 on July 7 and on August 17, 1954, or the third time in opposition to it's own place, which is very important.

1940 August 19 to September 15, 1953
Mars had completed 7 round trips. Note low on Coffee on that date.
1954 December 4
Mars made 7 1/2 round trips or opposite it's own place on August 19, 1940.

I will conclude this chapter with the following explanation if Mr Gann's analysis of price using Soybeans. He states, "The one-half point of the highest selling price and one-half between the high and low are very great because these equal the 45 degree angle or the gravity center. For May Beans these prices are 218 3/8, 240 3/8, 251 7/8, and 319 1/8. On the weekly or monthly chart, use the date when the extreme high or extreme low is made and draw a 45 degree angle up and down starting from the above halfway points. These angles are very important for determining highs and lows and a change in trend.

From the extreme lows or extreme highs, you add or subtract the proportionate parts of the circle, as given below.

44 added to 360 gives 404. From 404 subtract 90 gives 314, and the degree in the sign in 14 degree Aquarius. 90 degrees or

square from this is 234 or 16 degrees Scorpio.

436 3/4 minus 360 gives 76 3/4, or 16 degrees 45' in the sign Gemini. Subtract 120 gives 16 degrees 45' Aquarius or a price of 316 3/4. A square or 90 degrees from this is 16 degrees 45' Scorpio, price 226 3/4.

The lows of 67, 68 69 equal 7, 8 and 9 degrees in Gemini. 120 degrees subtracted gives 307, 308 and 309, the triangle points which are 7, 8 and 9 degrees Aquarius. Subtract 90 degrees from these prices gives 217, 218 and 219 or 7, 8 and 9 in Pisces.

131 high, add 180, gives 311 or 11 degrees Aquarius. Subtract 90 gives 221 or 11 degrees Scorpio.

October 5, 1936, futures trading started in Soybeans. The first sale was 120. Add 180 gives 300 or 30 degrees in Capricorn.

218 3/8 is 8 degrees 22' scorpio. Add 90 gives 308 3/8 or 8 1/2 degrees in Aquarius.

240 3/8 is 0 degrees 22' Sagittarius. Add 60 gives 300 3/8. Add 90 gives 330 3/8.

251 7/8 is 12 degrees in Sagittarius. Add 60 gives 311 7/8 or 12 degrees Aquarius. Add 90 gives 348 or 12 degrees Pisces.

1930, Jun high 216. Equals 6 degrees Scorpio. Add 90 gives 306 or 6 degrees Aquarius. Add 225 gives 441, which is the square of 21, and 441 is 21 degrees in the sign of Gemini, which is 81 more than 360, the square of 9.

436 3/4, subtract 135, gives 201 3/4 or 1 degree 45' Aquarius. Subtract 180 gives 256 3/4 or 16 degrees 45' Sagittarius. Subtract 225 gives 221 3/4 or 1 degree 45' Sagittarius. Subtract 236 1/4 gives 200 1/4 or 20 degrees 15' Libra. The low on May Beans in February, 1949 was 201 1/2.

344 1/2 subtract 33 3/4 gives 310 3/4 or 10 degrees 45' Aquarius. Subtract 45 gives 299 1/2 or 29 degrees 30' Capricorn.

120, add 90 give 210 or 30 degrees Scorpio. Add 125 gives 255 or 15 degrees Sagittarius. Add 180 gives 300 or 30 degrees Capricorn.

67, add 90 gives 157 or 7 degrees Virgo. Add 135 gives 202 or 22 degrees Libra. Add 180 gives 247 or 7 degrees Sagittarius. Add 225 gives 292 or 22 degrees Capricorn. Add 240 gives 307 or 7 degrees Aquarius. Add 270 gives 337 or 7 degrees Pisces. Add 315 gives 382 or 22 degrees Aries. Add 360 gives 427 of 7 degrees Gemini. Add 271 1/4 gives 438 1/4. High on May beans was 436 3/4. After that high the next extreme low was 201 1/2. Note that 67 plus 125 gives 202, and that one-half of 405 is 202 1/2, and 180 plus 22 1/2 is 202 1/2, which are the mathematical reasons why May Soybeans made bottom at 201 1/2.

All of the above price levels can be measured in Time Periods of days, weeks and months, and when the time periods come out at these prices, it is important for a change in trend, especially if confirmed by the geometrical angles from highs and lows."

CONCLUSION

Gann's ability to forecast events has not to this day been duplicated. His 1927 novel, "Tunnel Through the Air," forecasted the starting and ending of World War II, the dates of significant battles, who would start the war and how it would end. One of the statements in the novel was the Japanese had started the war, that the United States would use the "ultimate weapon" upon that country to end the war, and that this event would be remembered for as long as the world stood. There were many other forecasts in the book.

This book is a "love story" according to Gann, although, it will never make Harlequin's list. As a love story, it is lacking, however, 1927, the last section of the book is reasonable science fiction writing. The greatest interest to traders is that, in this book, Gann mystically puts forward his ideas about cycles.

Gann's forecasts were all related to cycles that were geometrically based, or divisions of the 360 degrees circle. All of these major cycles can be viewed as astrological, or scientifically through astronomy, although an understanding of astrology is not necessary to trade from them. The cycles are cycles of the earth and the solar system. Of course any stock market analyst who mentions the moon, or a planetary cycle, suffers an automatic reduction in credibility with his audience, but the validity of these cycles is obvious.

Whether there is a cause and effect relationship between what we see in the sky, and our actions on earth, or possibly, just another way of counting time (a big clock in the sky). Whether or not a relationship exists, could be debated endlessly, but there is little doubt that the astronomic cycles played out in the Solar system can locate the start and end of cycles on Earth. One of these cycles, the ten year cycle, gives us years over and over again, such as the fifth year of the decade, which as a year, is very bullish in virtually every decade. It is wonderfully predictable.

In the stock course, Gann says that the "Master Time and Price Calculator" is the square of 52 on the weekly chart. The master time and price calculator is the cycle of years, that is to say, years in (the divisions of a year on a 360 degree circle), and years out (one year, two year, three year, etcetera), the anniversary dates of major highs and lows that occurred in the past. If you look at Gann's work with monthly charts, you will see that it was nothing more than the cycle of the years. Twelve months, 18 months, 36 months, 48 months, etcetera, are the counts of years and half years and so on.

When you go through monthly charts you will see these cycles of years setting up over and over again. Six months from top, 12 months from bottom, 36 months from top, bang, change in trend. It can be that simple. It is doing those monthly counts.

If you grasp this concept of 360 degrees and the yearly cycles in days, weeks and months as probable turning points, and the completions or starts of movements, the end of cycles can be determined by the manner in which price moves into them in time. So, we look at 360 degree moves in time as turning points, and the equal divisions of that time. We, then, qualify the possible turning points by the manner of price movement and volume into those times.

Understanding the nature of time and movements in price is something that may not come easily, or in a short time for most people. Knowledge, such as the idea that time must pass for a top to form before a bear trend will establish itself, is important to good trading.

This understanding of how markets and stocks move through time, and what bottoms and tops look like, or what patterns appear at those significant junctures will help to qualify if the cycles are valid from certain highs and lows.

So, one of the most important skills to develop for trading is the ability to recognize and anticipate chart patterns. Most of these patterns are so simple that the tendency is to ignore them. Double and triple bottoms and tops, rising bottoms, lower highs. By the time you have gone through all of the lessons from this book, you can see that calendar day count are very important, and yield excellent turning points.

Confirmation of a change to take place will come from the analysis of squares of ranges in time on the weekly and, more importantly, monthly charts- squares of lows, highs in time, and the square of nine. When cycles in time, squares of ranges or highs come together in the same time frame, a change is very likely in the trend of a stock, an index or commodity.

One major difference between a professional trader and a novice trader is a professional knows how to enter a trend once it becomes established, with a minimum amount of risk. I cannot emphasize enough the knowledge of counter trend time periods.

Gann, in his market letter, did not have many trades (not as you might think). You will see stories that say he had 156 trades in thirty days and the like, and at times he did, but that was for show- publicity. In actual trading, he might have traded only eleven stocks a year. Not many, considering that he was plotting every single stock on the NYSE.

Keeping the discipline is difficult because you plot your daily chart five times a week, the weekly chart once a week, and the monthly chart only once a month. You end up doing twenty times as much work on the daily chart as you do the monthly chart, which makes the pattern there twenty times more important, psychologically, than that of the monthly chart. You should check the weekly and monthly charts every day, in fact, the best way to arrange your charts is to put the monthly chart on top of the weekly, and the daily on the bottom which will help you to keep your perspective.

You may find it to be of value to use a large calendar to keep track of monthly, weekly, and daily turning points for all of the stocks you follow. You can start this by using the monthly charts, and then migrate to the weeklies. As those weeks or months approach, add the daily setups on specific days. By doing this you will find specific times of one or two days when numerous stocks indicate change in trend, and the opportunity for index trades is improved.

I have been following this method of using a calendar and have found that many times the markets will move down hard into a turning point day for the indexes, with many stocks showing a day or two later as their turning points. The result will be that the market finds a bottom on the index turning point day, and will then accelerate in the other direction on the day which was indicated by individual stocks.

One of the profitable strategies I have found, is to find a highly probable turning point for the indexes, such as a 90 day blow off combined with a 45 day death zone move terminating some longer cycle, and to then look for individual stocks which are also terminating a long term cycle, expiring a week or so earlier than the market. If the analysis is correct on these occasions, the stocks with cycles expiring earlier that the market will give a distribution pattern, or a sideways or topping pattern, as the market continues up. When the market turns down, these stocks will move down quickly. I have successfully employed this strategy, and to get a quick idea of how it works you might look, again, at the Disney turning point for late June to early July, and then the S&P 500 setup for the first week in July. You could, also, look at the setups that showed in August of 1987, as this was also expiring 5 year and 7 year cycles. It was very interesting to see that many stocks that gave bottom in March of 1982, gave their top in March of 1987 (as General Dynamics), and gave a lower high in August 1987, which left them in a very weak position following that turning point.

SUMMARY

I know that you can get lost in this analysis- trying to make it exact, because it lends itself to that. You will see it be so precise, so often, that you will try to make it that way all of the time. That isn't necessary. Remember time is the most important factor. Patience is a virtue, especially in the stock and commodities markets, you must have the patience to wait for the right opportunity to come, and not be anxious to get in or out to soon.

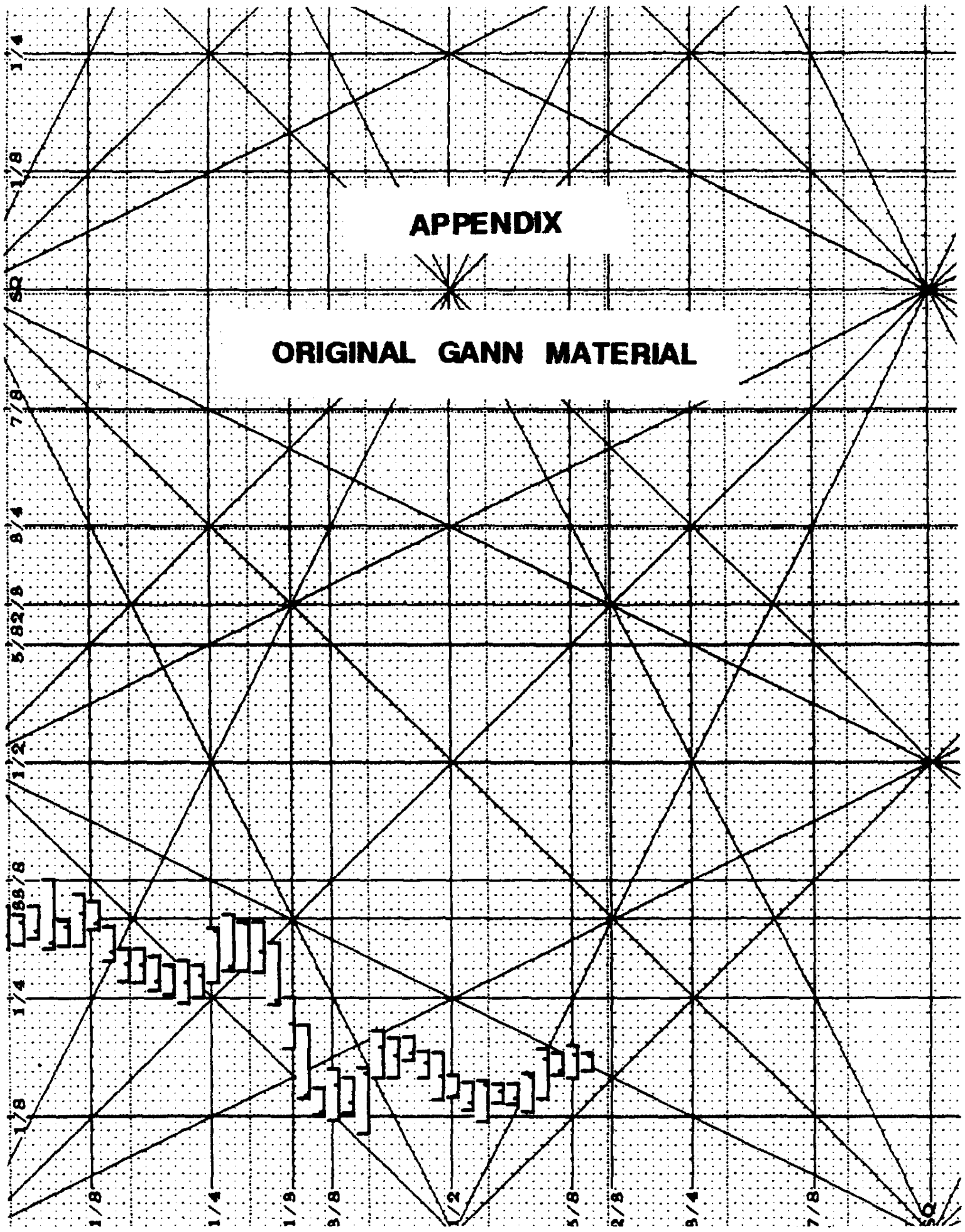
People try so hard with this method, and are so sincere. They study it and work with it, and sometimes they get off on a tangent where they feel they have found the one key to the whole system-the short cut, and they no longer have to do all of the work that is necessary to make the good trades. They can just use this one tool. Always keep in mind that if it was that easy everyone would be rich. Remember that if this was a book on how to play golf, you would not expect that, by just reading it, you could go out and play on the professional tour. First you have to practice. You have to learn not to choke on that 3 foot put. After you have put in the time and work, and studied numerous charts, the you will know those setups we have discussed, and you will have the confidence and knowledge necessary to trade profitably.

The purpose of this book is to teach you how to locate the price and time setups which have a high probability of being the start of a fast movement. If you have the discipline to only look for trades during those time setups, and not attempt to trade every movement in the market, your trading will be quite profitable.

Always have a plan. The opportunities are many in the markets, and you will miss many. But do not worry or fret about missing an opportunity, as another will be along shortly. Trade from a plan and do not react to the markets. Knowledge, discipline, courage and hard work are the requirements of skillful trading, and in this text I have laid out much of the knowledge necessary. Now it is up to you to acquire the discipline, courage and to do the hours of study and work. Go over the lessons, learn the ideas, apply them to your own work. Build your foundation and you will have success.

APPENDIX

ORIGINAL GANN MATERIAL



AUBURN MOTORS

"The chart enclosed on Auburn Motors has all of the natural important angles place on it which shows the natural resistance angles obtained by dividing up the circle of 360 degrees. We have used only the 45 degree angles from tops and bottoms, the 90 degree angle and the horizontal angle, which is equal to an angle of 90 degrees. Every stock squares itself according to price and time and when it breaks out of the square one way or the other continues to move in the same direction until it reaches another important 45 degree angle or resistance point according to the time or price. We use the angles of 11 1/4, 22 1/2, 33 3/4, 45, 56 1/4, 60, 67 1/2, 78 3/4, 90 and so forth. Then draw the 45 degree diagonally where the time crosses the 45 degree angle from either the important top or bottom.

The crossing of two right angles is very important for a change in trend as we will show on the example of Auburn Motors.

Auburn Motors made the extreme high on April 1, 1930, at 263 3/4; then made a second high on April 10th and a third final high on April 16, 1930, when the price reached 262 3/4. We draw the 45 degree angle from the top of April 1st and another 45 degree angle from the last top made on April 16th; then number the days across and draw the 45 degree angles bisecting the 45 degree angles from the top.

[1] Example: April 15th the 45 degree angle from April 1st and the 45 degree angle from 11 1/4 days over crossed at the exact point where Auburn made the low price at this time. In other words on April 15th Auburn made bottom on the two 45 degree angles; then rallied to April 16th, [2] broke the 45 degree angle and the trend turned down.

[3] Note 23 degrees or days over where we reach the angle of 22 1/2 degrees and that Auburn made low on the 22nd day, rallied only one day, then broke the day angle or time angle of 33 3/4; [4] next broke the more important 45 degree angle, showing that it was getting weaker all the time. [5] It made bottom at 180 on the 27th day from the top. 180 is always an important resistance point because it is one-half of the circle of 360 degrees. Auburn rallied to 201. The next important resistance level is 202 1/2, or 22 1/2 degrees added to 180. Auburn at this top was just under the 45 degree angle. [6] Next it broke the 45 degree angle from the day angle of 56 1/4.

[7] May 20th, declined to 150, another important natural angle because it is 5/12 of the circle. [8] This bottom was reached on the 40th market day. Auburn then rallied to 172 on the 45th market day, which is very important for a change in trend and top. [9] Nest it broke the 45 degree angle drawn from the bottom at 150; continued down broke the 45 degree time angle from 78 3/4; [10] then broke the 45 degree angle from 90 timing angle. 90 is

twice as strong as 45 and very important for a change in trend.

[11] June 23rd, this is an important date for a seasonal change in trend, Auburn declined to 91 holding 1 point above the 90 price angle or resistance which is always important for tops and bottoms. It was on the 67th day and 67 1/2 is a strong angle.

[12] July 17th, Auburn rallied to 141 on the 86th day and failed to reach the 45 degree angle from 101 1/4 days. [13] Next it broke the 45 degree angle from 112 1/2 days; then broke the 45 degree angle drawn from the low of 91, which indicated that it was in a weak position and going lower. [14] Note that 91 was the lowest parallel angle or lowest 45 degree from the 45 degree angle draw from the tops of April 1st and April 16th. This parallel was 53 points wide from April 1st top and 59 wide from April 16th top. [15] The bottom occurred on the 120th day time angle and 120 is important because it is 1/3 of a circle.

[16] August 12th, Auburn declined to 102, which is just above the natural resistance angle of 101 1/4 and this bottom occurred on the 108th day and just above the 45 degree angle from the 135th day time angle.

[17] September 8th, Auburn rallied to 135 and hit the 45 degree angle from April 1st top. It was on the 135 degree natural resistance angle, which is 3/8 of a circle and very strong. A stock is always a short sale the first time it rallies to the 45 degree angle from its top, protected with a stop-loss order 3 points above the angle, and at this point it was a safe short sale because the price was 135, which equals the crossing of two right angles. [18] Auburn next broke under the 45 degree angle from the bottom at 102 and the 45 degree from the 135th day. It continued to break angles and to work into weaker squares until the final bottom.

[19] November 5, 1930, Auburn declined to 60 3/8. 60 is always important because it is 1/6 of a circle. It made this bottom on the 177th market day from April 1st top. Note on the 180th market day Auburn made a higher top and turned the trend up for the first time. The bottom was reached on the 190th day angle or on a 45 degree angle drawn diagonally from 190 days down from the top.

[20] November 17th, for the first time since April 1930, Auburn crossed the 45 degree angle from the top of April 1st, when the price reached 77, where the trend turned up, and put Auburn in a very strong position because it crossed the 45 degree angle at such a low level.

[21] Note the top of November 20th was made at 62 1/2, just under the 45 degree angle from the top of April 16th. Then a decline followed and bottom was reached at 72 1/2 on November 28, 1930.

[22] November 29th, Auburn crossed the 45 degree angle from April 16th top for the first time, indicating that it was in a stronger position and that the main trend had turned up because it had crossed the extreme outside parallel angle. This low was

made around 78 3/4, the natural angle, and Auburn never sold lower after crossing this outside angle until advanced to 295 1/2 on April 14, 1931.

After Auburn regained or got above the degree angle from the top OF April 16, 1930, it started to regain 45 degree angles and making higher parallels to the left of the 45 degree angle from 60 3/8 just the reverse of its movement on the way down from 263 3/4 to 60 3/3.

[23] December 18, 1930, Auburn advanced to 119 3/4. This was nearly twice the price of 60 3/8, and the natural angle, or 1/3 of a circle, is at 120. This top occurred on the 36th market day.

[24] December 23rd, Auburn declined to 91 1/2 and made a second bottom at 92 on december 27th, holding above the 90 degree resistance point. Note that 90 was the half-way point from 60 3/8 to 119 3/4, which showed that Auburn was in a strong position. The last low of 92 was reached on the 43rd market day, and the price was above the 45 degree angle from 33 3/4 days.

[25] January 5, 1931, Auburn rallied to 116 on the 225th market day from the top of April 1930. 225 is always strong because it is 5/8 of a circle. Auburn then declined and broke the 45 degree angle drawn from the bottom of 60 3/8.

[26] January 14th and 17th, decline to 101 1/4, which is the natural resistance angle. Note the cross angle of 101 1/4 and that the price was bottom on the 60th market day, which your rule tells you is very important for a change in trend because it is 1/6 of a circle. The trend turned up and Auburn continued to get into a stronger position on angles.

[27] January 22, 1931, Auburn crossed the 45 degree angle, marked in green, from the 60th market day and on January 26th crossed, or regained, the 45 degree angle drawn from the bottom at 60 3/8. The price was 128 on the 67th 1/2 day angle. When a stock regains the 45 degree angle from the bottom it is in a very strong position. Auburn never got back to the 45 degree angle from 60 3/8 until it made top on April 14, 1931, at 295 1/2. On the advance after crossing the 45 degree angle of 60 3/8, it continued to show strength because it worked into higher parallel angles to the left of the 45 degree angle from the bottom.

[28] February 9, 1931, Auburn crossed the 45 degree angle drawn from the top at 119 3/4 made on December 18, 1930. This was another indication of a very strong position.

[29] February 26th, Auburn made top at 217 on the 92nd market day from the bottom or just 2 days over the 90th day, which is always important for a change in trend. Note the natural resistance level at 213 3/4. [30] Auburn then dropped back under this angle and broke back under the 120 day time angle marked in green, which put it into a weaker position and indicated a decline. You can see that Auburn on the way up worked to the 45th. 90th, and other important days on time just the same as it did on the way down.

[31] March 7th, Auburn declined to 175, just 5 points under

180, which is half of the circle, and it reached the 45 degree angle which was 1/2 of the distance between the 45 degree angle drawn from the top of 119 3/4 and the 45 degree angle drawn from the first top made on November 20, 1930, at 82 1/2. [32] Auburn made this top on the 100th market day and on the 101st day crossed the 120 green angle, which is the time angle. Then made two days tops on the 45 degree angle from 217 top. [33] Then crossed the 45 degree angle from the top at 217 and never dropped back under it and continued to make higher parallels to the left of the 45 degree angle from 60 3/8.

[34] April 14th, Auburn reached extreme high of 295 1/2. This was a date for a seasonal change because the last high occurred on April 16th, 1930, from which the big decline followed. [35] Note that the same width of parallel from the lowest 45 degree angle drawn from 101 1/4 and 103 1/2 bottoms made January 14th and 19th, 1931, which was 59 wide. April 14th, the 180th day angle, crossed at 290. This was the crossing of 2 right angles one the parallel angle of same width of the fluctuations from 263 3/4 to 91, and the other from the extreme of 101 1/4 to 295 1/2. [36] The same day that Auburn advanced above the crossing of those parallel angles of 290 it declined and closed at 287, below those angles indicating a weak position. Auburn only closed 1 day above the width of the same parallel on which it declined. Then it started breaking parallel angles and getting into a weaker position right along.

It is important to note that 292 1/2 is an important resistance level because it is 270, which is 3/4 of a circle, plus 22 1/2, and Auburn failed to go over three points above this angle. Another thing to consider is that from 60 3/8 to 295 1/2 Auburn was up 235 1/8 points, which was nearly 2/3 of a circle and another reason for strong resistance. You should look up your resistance card and see the other important points around this level. For example, Auburn's extreme high was 514 and the low on the last move 60 3/8. This would make the half-way point 287 1/8. Auburn's extreme low of history was 31 3/4. This would make the half-way point 272 1/2. Then when Auburn broke back under the first half-way point of 287 1/8 it indicated weakness; next breaking the half-way point of the life fluctuation at 272 7/8, indicated greater weakness. The next important point was 257 or 1/2 of 514, the highest price at which Auburn over sold. Therefore, when Auburn broke under 257 it was in a very weak position and indicated a further sharp decline.

[37] April 20, Auburn declined to 180, getting support on the natural angle or 1/2 of the circle. This was on the 315th market day from April 1930, and on the 136th market day from the low of 60 3/8 and on the 166th calendar day. 165 is important because it is 1/2 between the angle of 150 and 180. Auburn made bottom on the 45th market day from the low of 101 1/4 made on January 14, 1931. It rested on the lowest parallel angle of 45 degrees.

[38] From 60 3/8 to 295 1/2 gives the half-way point at

177 3/4 and Auburn holding above this half-way point showed it was in a strong position and ready to rally. At that time, 178 1/2 was on the 45 degree angle from 103 1/2, the low of January 19, 1931, and being the last and lowest 45 degree angle it was the strongest support point, from which a rally must take place an d the stock was a purchase with stop 3 points under.

[38] April 24th, Auburn rallied to 219 and hit the 45 degree angle from the bottom of 175 made on March 7th; then broke back under 213 3/4, the price angle, and broke 146 1/4 the day angle.

[39] April 30, 1931, Auburn declined to 187, resting on the 45 degree angle from the low of 103 1/2. [40] A sharp rally followed and on May 1st Auburn advanced to 227 1/2, just under the 45 degree angle from 157 1/2 days. This was a cross-angle and also a 45 degree angle from the top of 119 3/4. The price of 225 was on a strong resistance, or 225 degrees, which is 5/8 of a circle, and Auburn failed to go 3 points above it. [41] A big break followed in the afternoon of the same day and Auburn declined to 184, which was 3 points under lowest 45 degree angle from 103 1/2, the bottom of January 19, 1931, and was just above the 45 degree angle from the 135th market day and on the 146th market day from November 5, 1930, and on the 179th calendar day from the bottom, which was a strong indication for bottom or a change in trend. Auburn quickly regained the 45 degree angle from the lowest parallel; then crossed the 45 degree angle drawn from 60 3/8.

[42] May 5th, Auburn advanced to 225 1/2, where it struck the same resistance of 225 on the natural resistance angles. It hit a 45 degree angle from the low point of 183 and the 45 degree angle from the top made on May 1st, and was just under the 45 degree angle from the 157 1/2 day, a strong resistance point.

May 6th, Auburn declined to 203 on the 45 degree angle from the 146 1/4 day and being just above the natural resistance angle of 202 1/2, it received strong support, rallied and crossed the angle of 45 degrees from 60 3/8 which put it again in a very strong position.

[43] May 9, 1931, Auburn advanced to 252. This was just under the 45 degree angle from 219, the low of March 30th and on the 22nd day from the top of April 14, 1931. You will note that 257 is 1/2 of the highest price at which Auburn ever sold-514. May 9th was 330 market days from April 1, 1930, which is important, and 103 market days from 60 3/8 and 185 calendar days form 60 3/8. On May 9th Auburn dropped back under the 45 degree angle from the 168 3/4 day, declined to 237 where it rested on the angle of 45 degrees from the top at 119 3/4 made January 18, 1931.

At this writing, May 9, 1931, Auburn is in a strong position on Angles, but is a short sale on rallies with a stop at 260, which is 3 points above the half-way point, or 1/2 of 514. The stock is in a strong position on angles and you have to watch the 45 degree angle from the top at 295 1/2 and the angle marked in green from 180. As long as Auburn can hold above the 45 degree angle from 60 3/8 it is still in a position to rally, but when it breaks the 45 degree angle from 60 3/8 and the lowest 45 degree angle from

101 1/4 and 101 1/2, the bottoms of January 14th and 19th, 1931, it will then indicate a big decline.

If Auburn can cross 260, the next resistance point will be around 273 and the next around 287 and should it get through the old top of 295 1/2 or cross 300, it will then indicate very much higher prices. You should always watch the 1/4 and 1/2 points from the last important bottom. In Auburn's present position, the point to watch would be between 180 and 252. Also 237 3/4 which is 1/2 from 295 1/2 to 180. Auburn closed just around this point on May 9th, which is near 240 and an important resistance level, which is 2/3 of the circle. Should Auburn break 234 now, or over 3 points under this half-way point it will indicate lower.

MAY 9, 1931."

The following is an excellent example of Mr. Gann's analysis of an individual stock. I have numbered in the text and corresponding points of reference on the chart.

UNITED STATES STEEL CORPORATION

"This company was incorporated February 25, 1901. Trading in the common stock began on the New York Stock Exchange on March 28, 1901, when it opened at 42 3/4. Now, this being a new stock, which was not listed on the exchange before, we have no high and low to go by, so the first rule to apply is: If the stock moves down 3 points first, it will indicate still lower; if it advances 3 points, it will indicate that it is going higher. Next, we put on the square of 90. [1] You will see that I have drawn the angles up from 0 beginning with March 1901, and drawn the angles down from 90 beginning March, 1901. These angles will show whether the stock is in a strong or weak position after it fluctuates for a short time.

Using the 3-point rule, the stock advanced to 46 from 43, which is 3 points up and would indicate higher, especially as it had crossed 45. But you will note it is below the 8 X 1 angle drawn down from 90 which shows a weak position. While from the bottom it is above the 8 X 1 angle and is strong for some kind of rally. It goes to 55. Now note your resistance levels, 56 1/4 is the resistance level because it is 45 plus 11 1/4. 54 is the resistance level on the Nine Square and the Master Twelve Square. 55 is one of the psychological points where the public buys a stock after it crosses 50 because they think it is going much higher. [2] After the stock has gone up to 55, take 1/2 from 43 to 55, which is 49. Breaking 49, the halfway point, shows trend down. After breaking this level it broke the low level at 43.

[3] The next way to calculate is to take 1/2 of 55, which is 27 1/2. During the panic of May 9, 1901, U. S. Steel declined to 24. Twenty four is an exact point on the Master Twelve Chart and 22 1/2 is the support levels on the angles. Take the halfway point of the stock 27 1/2, and the angle of 22 1/2 degrees and get the halfway point between these. It is 25, which indicated around 25 would be strong support for a rally.

[4] Next, from the top 55 to the low 24, we get the halfway point which is 39 1/2. If the stock crosses this point, then the next resistance point is the 3/4 point, which is 47. It advances to 48 in July, 1901, and holds for several months without breaking back below 39 1/2. However, it fails to cross the 45 degree angle from 90 and from 55. [5] In October, 1902, it breaks 39 1/2 and breaks below the 45 degree angle from the 24 bottom, putting it into a weak position. [6] Notice that in July, 1923, the 45 degree angles from 0 and from 90 cross at 28 and that 27 1/2 is the halfway point of 55. [7] The stock breaks under the 45 degree angle and from 0 for the first time; then goes straight

down to 8 3/8 in May, 1904, and rests on the angle of 4 X 1 from 0, the base or beginning point, reaching bottom on the 39th month from March, 1901, and 36 months from the bottom of May, 1901, coming out on an even cycle. Being down 46 points from the top would indicate a strong support level because 45 points down is equal to the 45 degree angle and indicates strong support. Nine is 5/6 of 55, a support level and any stock getting down around 9, the digit, always receives good support. This is a strong number for stocks to make bottom on.

[8] In August, 1904, the stock crosses the angle of 2 X 1 from 90 for the first time and gets active in September, crossing the 45 degree angle from 55, which shows up trend. Twenty is 1/4 point from 55 to 8 3/8. It crosses this level, which indicates higher. The next point is the 1/3 point which is 23 5/8, which is also crossed. The next point is 1/2 which is 32 7/8. [9] In December, 1904, it makes 33, where it hits the angle of 2 X 1 from 55, reacts, then crosses 33 and goes to 38 in April, 1905, which is 5/8 of the distance from 8 3/8 to 55. Note 39 was the last top in February, 1903. [10] The stock declines to 25 in May, rests on the angle of 2 X 1 from 0. March, 1901, and on 2 X 1 from left of the 45 degree angle from 0 May, 1904, showing strong support, also because 23 1/8 was 1/2 from 8 3/8 to 38. The angles held the stock above the halfway point.

[11] Top reached was 46 in February, 1906. At 45 we naturally expect resistance. Besides, 43 1/4 is 3/4 from 8 3/8 to 55 and it is 60 months, or at the end of a 5 year cycle, and a reaction is due. [12] In July, 1906, it declines to 43. The halfway point from 25 to 46 is 35 1/2, and 33 3/4 is a strong resistance level. Again, 32 7/8 is 1/2 from 55 to 8 3/8. The stock is still above the angle of 2 X 1 from 0 in March, 1901, and only 2 points below the 45 degree angle from low in May, 1904, making this a strong buying level. [13] The next top is at 50 in October, 1906 and again the same top was reached in January, 1907. There was 4 months' distribution in a 5 point range, holding above 45. January, 1907, the last month that top was reached, was 69 months from top in April, 1901 and 71 months from the date of incorporation, February, 1901, also 32 months from the low in May, 1904. Going into the 7th year indicates lower prices. The 7th year is always a year from a panicky decline, and failing to go 3 points above the top made in July, 1901, plus 5 5/8 equals 50 5/8.

[14] In January, 1907, Steel broke the angle of 2 X 1 from 33. [15] In March, 1907, it broke the 45 degree angle from the bottom of May, 1904, and also get below the 45 degree angle from 0 in 1904, putting it into a very weak position. It declined to 32, the support level of July, 1906, and 1/2 from 8 3/8 to 55. 29 3/4 is 1/2 from 8 3/8 to 50. It made bottom for 3 months around 32. [16] In July, 1907, it rallied to 39. Note the angle of 2 X 1 from 0 in March 1901, and the 45 degree from 0 in May, 1904, crossed at 38, making this a strong resistance level and hard to pass. In August, 1907, Steel declined and broke 32. This was the forth time at this level and my rules say that when a stock reaches the same level the

4th time it nearly always goes through and makes a higher top or a lower bottom.

[17] I November, 1907, Steel declined to 21 7/8. The resistance level is at 22 1/2 and 20 is 3/4 point from 8 3/8 to 55; besides 24 is a strong support level, as shown on the Master Twelve Chart. I failed to decline to the angle of 4 X 1 from 0 March, 1901, and 2 X 1 May, 1904, showing strong support. Bottom was made on the 78th month from the top of April, 901. Note that 78 3/4 is a strong resistance level because it is 1/4 of 90. This was 80 months from March, 1901. Note the last low in June, 1904, was on the 40th month and 40 months later makes bottom again when time had balanced. The reason that 40 is strong is because it is 1/8 of 360 and 1/3 of 120, the 10-year cycle.

In January, 1908, Steel crossed the angle of 2 X 1 from January, 1907, and in March crossed the angle of 2 X 1 from May, 1901, and 3 X 2 angle from 0, 1904, putting the stock into a strong position. Later, the stock crossed 36, the halfway point from 50 to 21 7/8, which indicated higher. In August, 1908, which was 90 months from March, 1901, the angle of 2 X 1 from 0 and 90 March, 1901, crossed at 45; also the 2 X 1 from 21 7/8 crossed at 45. The stock advanced to 48 in August and reacted to 42 in September. Being now out of the first square of 90 degrees having moved over 90 months, put it in a strong position. My rule says that stocks always higher in the 8th and 9th years of a 10-year cycle.

[19] In November, 1908, Steel crossed 50 and advanced to 58 3/8 on the 90th month from the top in April, 1901, which would indicate top and a strong resistance, but the fact that the stock got 3 points above 55, the high of 1901, indicated higher prices later, especially as it was out of the square of 90. The stock was up 50 points from 1904 low and 1/3 would bring it back to 42, which was the last low made in September, 1908. In February, 1909, Steel declined to 41 1/8. The writer predicted the top for 58 3/4 in November, 1908, and the bottom for 42 in February, 1909. See the Ticker Magazine of December, 1909.

[20] In April, 1909, Steel crossed 1/2 point from 58 3/4 to 41 1\8, regained the angle of 2 X 1 from 0 March,1901, and in May crossed 58 3/4, the top, getting above 45 degrees angle from 0, 1904, putting it in a very strong position. [21] Now the question arises how to figure how far the stock will go when it has gotten into new territory after so many years. If we add 45 to the last important top, which was 50 in 1906 and 1907, we get 95. Steel sold at 94 7/8 in October, 1909. Remember my rule says that tops and bottoms become halfway points. 21 7/8 the bottom, to 58 7/8 equals 37 points. Add this to 58 3/4 and we get 95 3/4. The top at 94 7/8 made 58 1/2 the halfway point from 1907 to 1909. The writer sold Steel short at 94 7/8, stating that it would not go to 95. This is recorded in the Ticker Magazine of December, 1909. When Steel sold at 94 7/8 it got slightly above the 45 degree angle from the top at 50 in January, 1906, this was exactly 73 points from the 1907 low and 86 1/2 points from May, 1904 low. Any time a stock advances 84 to 90 points from the bottom or base,

it is in selling territory. While this price was 4 7/8 points over 90, it was only 86 1/2 points up from its base; therefore, it would have to cross 99 to be out of the square from its extreme low in May, 1904. This is figuring according to space movement. The stock was up 53 3/4 from low of February, 1909, which was one of the strong resistance points. It made top on the 102nd month. The resistance point is 101 1/4. It was 24 months from November , 1907, coming out on an exact cycle and 65 months from May, 1904. It started to break when it reached 67 1/2. This was 104 months from 1901. The 105th month or 8 3/4 years is an important resistance point.

[22] To determine resistance levels, we first calculate the 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1/3, and 2/3 points of the space movement. 76 5/8 if 1/4 of the movement from 21 7/8 to 94 7/8. In February, 1910, Steel declined to 75, getting strong support at the 1/4 point. In March, 1/10, it advanced to 89, making top 3/4 of the distance from 75 to 94 7/8 and just under the 45 degree angle from 94 7/8. In July, 1910, Steel declined to 61 1/8 and failed to make 58 1/2, the halfway point from 1907 and 1909, which showed that it was getting strong support. 63 1/4 was 1/3 of 94 7/8, which indicated a support level. [23] The advance started and it worked up to 82 in February, 1911, just under 2/3 point from 94 7/8, hitting the 45 degree angle from 0 in 1904, and a decline followed.

[24] April, 1911, ended the 10-year cycle from the top in 1901. In August, 1911, Steel broke the 45 degree angle from 61 1/8 and in September, 1911, broke the 45 degree angle from November, 1907, and in October, 1911, declined to 50. [25] Note this was on the 89th month from the low in May, working out the 7 1/2-year cycle and reaching the angle of 90 degrees. The bottom at 50 was down 44 7/8 points from the top, making this a strong support level because it was down 45 points,and equal to The 45 degree angle. 50 5/8 being a resistance level showed that this was the point to buy Steel again,; also 51 5/8 was 1/2 from 8 3/8 to 94 7/8, and 47 3/8 was 1/2 of 94 7/8, the high point of the stock, all of which shows that this was a very strong support level. The stock was just below the angle of 2 X 1 from May, 1904, which angle the stock soon gained by getting back above it. It was down 2 years or exactly 24 months from the top and was 48 months from November, 1907, bottom, which balanced time and was an indication for another upward move to start. It was the 128th month from March, 1901, which put it out of the hexagon movement. See Hexagon Chart.

[26] In September and October, 1912, Steel made top at 80, which was 3/4 from 94 7/8 to 50 and failed to cross the high of May, 1911. Now note top ten years back, September, 1902, from which a decline followed. In October, 1912, a decline started and in December it broke the angle of 2 X 1 from 50, afterwards getting weaker and breaking all support angles from 1901 to 1904 and 1907 to 1909 bottoms. [27] In June, 1913, again declined to 50, the same resistance level as October, 1911, and 44 months down from the 1909 top, 52 months from February, 1909 bottom, 68 months from 1907 low and 109 months from 1904 low. This was 7 years or 84 months

from the 1906 bottom. You can see from this that the stock was still in a strong position according to the space movement or resistance levels, but in a weak position on angles and was running down to complete the 7 year cycle from 1907.

[28] In February, 1914, Steel rallied to 67, just 2 points above the 1/3 point from 94 7/8 to 50. Note that it made 67 for 2 months, hitting against the angle of 2 X 1 from May, 1904, and failed to reach the angle of 2 X 1 from October, 1909. To run out a 10 year cycle from low in 1904 would indicate bottom in May and June, 1914, and 7 years from low in November, 1907, would be November, 1914. [29] The Stock Exchange closed at the end of July, 1914, on account of war and U. S. Steel sold around 32 on the New Street Curb in the month of November, 1914. So for the purpose of calculating, November, 1914, should be considered, according to time, the month when Steel reached low. [30] However, this level was lower than it sold after the Exchange opened, so we must also calculate the exact date that Steel made the extreme low. This was in February, 1915, when it sold at 38, just 168 months or 14 years from March, 1901, 64 months, from 1909 top, 72 months from February, 1909 bottom, and on the 88th month from 1907 bottom, all strong time cycles indicating bottom. The stock went below the angle of 4 X 1 from May 1904, but quickly recovered and stayed above it. This bottom at 38 was just above 2/3 point from 94 7/8 to 8 3/8, and 3/4 point from 21 7/8 to 94 7/8 was 40. February, 1909, bottom was at 41 1/8. 37 1/2 is a natural resistance level, being 30 plus 7 1/2 or 22 1/2 plus 15, and 7/8 of 45 is 39 3/8, all strong resistance points on space movements.

How to forecast from this point according to time. Going back 10 years we see that in 1905, 1906 and in January, 1907, the stock advanced; then in 1915, 1916, 1917 it should be up trend. We add 7 years to October, 1909 top and get October, 1916. [31] Top was reached in the early part of November, 1916, when the stock sold at 129, and a sharp decline followed to December, 1916, when the stock sold at 101, but final low was not reached until February, 1917, when it sold at 99. This was close enough to the 10 year cycle from March, 1907, when there was a panic and 7 years from the top of February 1910. The top at 129 was 21 months from February, 1914, bottom. It broke on the 22nd month, had a small rally in the 23rd month, made bottom 24 months from February, 1915, low. Note strong position on angles at 99, which was 90 or square above the base of 8 3/8 and exactly on the angle of 2 X 1 from 80 bottom in April, 1916.

[32] The 180th month or 15 year cycle ended with February, 1916, with the stock holding above the angle of 2 X 1 from May, 1904, low, still below the price of 90. In August, 1916, it crossed the 1909 top at 94 7/8, which indicated much higher. Now we want to know what price to expect Steel to advance to, so we look back and see top at 80 in 1909, 1910, 1911, and 1912. In 1916 there was 3 months' bottoms at 80. This being the last low must be an important center or halfway point. Take the 1909 top, 94 7/8, and subtract the 1915 low at 38 and get 56 7/8. Add this to 80 and get

136 7/8. [33] The exact high on May 31, 1917, was 136 7/8, the stock being up 98 5/8 points from 1914 low, and 128 points from the 1904 low. It is always important to go back 5, 7, 10, 15, and 20 years to bottoms and tops. Taking the 1907 low at 21 7/8 and 1917 top at 136 7/8, we find the halfway point to be 79 1/4, proving that the starting point at 80 was to become the center of gravity or halfway point for a 10 year cycle.

.The 1917 top was 91 months from October, 1909 top, and exact square angle of 90 degrees, being only one month over it. I was 193 months or 16 years from 1901 top. Note November, 1908, top was 90 months from April, 1901, top. Sixteen years is 4/5 of the 20 year cycle. Stocks make their best advances in the 8th and 9th years of a cycle. May 1917, was 16 years and 3 months from March, 1901. There is a cycle of 32 years and 6 months. Steel had worked out 1/2 of this cycle to top. In view of the fact that top was reached on the 91st month and on the exact space movement was evidence that the stock was top for a further decline. In 1917, top coming out on the price indicated and on the 91st month, indicated top and a short sale. Besides, the volume of sales was very large, indicating distribution.

We know that 1907 was a panic year and that stocks made low in October and November,1907; then 1917 must repeat. 1910 was also a bear year and 1917, or 7 years later, indicated a decline. [34] The trend turned down in the panic of December, 1917, Steel sold at 80, the halfway point from 1907, getting just below the angle of 2 X 1 from 1907 and getting support 1 point below the angle of 2 X 1 from 0 May, 1904. December, 1917, was 90 months from July, 1910,and 30 months from February, 1914. This was another indication of bottom for rally. We know that Steel went up in 1908 and 1909. Therefore in 1918 and 1919, 10 years later, we expect it to work like 1908 and 1909. Steel advanced in 1918 and made last top in October and November, 1919, just 10 years from 1909 top. In 1920 and 1921, Steel followed 1901, 1910, and 1911. In June, 1921, made bottom 7 years from the low in July, 1914, nearly 14 years from the 1917 low, 76 months from the 1915 low, 49 months from 1917 top and 242 months from the top in April 1901, working out the 20-year cycle, the most important cycle.

[35] By taking the top at 136 5/8, we find that 1/2 of the total value is 68 1/4. The stock got support above the halfway point of it's total value, indicating a good buying price. It was down 66 1/4 points from the top, another resistance level. The 1/2 point from 8 3/8 to 136 5/8 was 65. The fact that it held above these halfway points indicated strong support and much higher prices to follow. The next point, 87 1/4, was 1/2 from 38 to 136 5/8. [36] It made bottom in February, 1918, and February, 1919, at this level. In 1920, after Steel broke 87, it never rallied again to 91 until it declined to 70 1/2 in June, 1921. [37] In 1922, Steel crossed 88, the halfway point; went to 111; then declined to 86. It remained 4 months at this same bottom without getting 2 points below the halfway point from 1915 low to 1917 high. This was proof enough that there was strong buying and

good support at this main center and that the stock would go much higher later. [38] In May and June, 1924, just 20 years from May, 1904, when Steel made low, it sold at 95 and has never sold at that price again before the high was made at 261 3/4, making higher tops and higher bottoms each year.

In November, 1928, Steel made top 20 years from November, 1908, top. [40] In January, February and March,1929, tops were around the same level, 192 to 193. [41] Steel declined and made the last low in May, 1929, at 162 1/2, a little lower than February and March, 1929, lows.

[42] On September 3, 1929, Steel reached the highest in it's history, 261 3/4. Note that tops were reached in July, 1919, and in October, 1909. This was 1 month sooner than the 1909 top and 1 month later than the 1919 top. The top was reached on the 343rd month from March, 1901. This is very important number, which marks culminations and indicates tops or bottoms, because it is 7 X 49, and 49 is composed of 7 X 7. The top was reached 98 months from the 1921 low, or 8 years and 2 months, making top early in the 9th year. Note that the top on the old stock before it sold ex-stock divided was reached in May, 1927, 10 years from the top of May, 1917. September, 1929, was 174 months from 1915 low and nearing 180 months from 1924 low, 72 months from 1923 low, 56 months from August, 1926 top, 24 months from September, 1927 top, and 147 months from May, 1917. This is important because 135 plus 11 1/2 equals 146 1/4, an important resistance level on the Master 12 X 12 Chart.

From September, 1904, when the trend turned up, to September, 1929, was 300 months, an important cycle, which indicated the end. It is important here to figure the space movement. Figuring from the low of 38 in 1915 to the high of 261 3/4 in 1929, we get 223 3/4 points. We know that 225 is one of the very strong resistance levels. Then figuring from the low of 21 7/8 in 1907 to the top at 261 3/4, find the space movement 240 points, another very strong resistance level, because it is 2/3 of the circle of 360 degrees. From the extreme low in May, 1904, Steel was up 253 3/8 points. 255 is the halfway point between 240 and 270, therefore a very strong resistance level

Figuring from the low at 70 1/2 in 1921 to the top in 1929, the space movement equaled 191 1/4 points. This is exactly 180 plus 11 1/4, another strong resistance point. The last run on Steel from 152 1/2 in May, 1929, to the top, was nearly 100 points. My rule says, when stocks have sharp advances, getting up 90 to 100 points, it is time to watch for top and a change in trend.

I have found, after years of experience, that over a long period of years a stock cannot maintain a gain of more than 1 point per month, or that it cannot do better than to hold the 45 degree angle. When a stock in it's early years goes up too fast and gets ahead of time, sharp reactions have to take place while the stock is squaring itself of adjusting itself to the time period. One of my rules is, when time and space balance, the stock makes top or bottom. This was the most important indication of all that Steel was top at 261 3/4.

October, 1907, was the next important low level after Steel reached extreme low in May, 1904. From October, 1907, to September, 1929, was 262 points. To be exact, this time was up on August 23, 1929. The top was reached at 261 3/4 on September 3, 1929, within 1/4 point of the 45 degree angle from 0 in October, 1907, showing that the stock had made it's return to the 45 degree angle. This indicated that time and space had balanced. Suppose the stock had crossed this angle. So long as it stayed above it, it would have indicated higher prices, but just as soon as it got below it, it would be an indication for lower prices. Analyze other stocks according to this same rule. Allowing 1 point gain per month for the stock to follow the angle of 45 degrees, Steel was behind time in May, 1929. That ia why the fast advance of 100 points took place, bringing it up to strike the angle of 45 degrees and make final top when time and space balanced.

I have stated before that important tops and important bottoms become halfway points or main centers. [43] Now, it is very important to know why Steel made low at 150 in November, 1929. We go back to December, 1928, and find the last low on Steel was 149 3/4, having declined from a top at 172 1/2. There were three weeks' bottoms around this level. After advancing from this level to 192 and 193, it declined to 162 1/2; then advanced to 261 3/4. From the 149 3/4 level, Steel advanced to a new high level of it's history up to this time. Therefore, 149 3/4 or 150 must become an important center or halfway point. The last important low level was at 38 in 1915. We subtract 38 from 149 3/4 and get 111 3/4. We then add 111 3/4, which gives us exactly 261 1/2. The stock made top at 261 3/4, which makes the halfway point from 1915 to 1929 at 149 7/8. U.S. Steel declined to 150 in November, 1929, which was a strong buying point, protected with a stop at 147.

[44] Figuring the total value of the stock, 261 3/4, we find the 3/4 point at 196 1/2, therefore a strong resistance level. Then, figuring from the last low, 70 1/2, in June, 1921, to the extreme high of 261 3/4, we find the 2/3 point 198. The writer advised selling U.S. Steel short in April, 1930, with stop at 199. On April 7, 1930, Steel sold at 198 3/4. It was below the angle of 8 X 1 from 261 3/4, a weak position on the angles from the top, but we must always consider the position on angles from the bottom. At this time, Steel was above the 45 degree angle from 1914 and 1921 lows.

It is important to consider the position of the stock according to the Time Cycle. April, 1930, was 10 years from the high in April, 1921, and the high in 1919, 20 years back, was reached in March and April. Going back 7 years, we find the high in April, 1923, and going back 90 months from April, 1930, we find that Steel made top in October, 1922, and a sharp decline followed in November. All of these time cycles indicated top for Steel in April and when it reached strong resistance levels and the Daily and Weekly Charts showed down, it was a sure sign to go short and pyramid on the way down.

Looking ahead: Knowing the date of incorporation of U.S. Steel, February 25, 1901, you would look back to see what happened at the end of the 5, 10, 15, 20, and 30 year cycles.

You would find that in 1901, 1902, 1903, and 1904, Steel was in a bear market and worked lower. Therefore, you would expect at the of the 30-year cycle very much lower prices, especially after Steel had reached extreme high in 1929, being the third high top in the bull campaign. You would also refer back 20 years to 1911 and 10 years to 1921. These cycles indicated that 1931 should be a bear year. Then, you would look for geometrical angles to tell when Steel was getting into a bearish position on angles coming down from 1929 top.

[45] May, 1930: When Steel broke below the bottoms of the previous 3 months, getting under 178, it broke under the 45 degree angle from 0 from the bottom of 1915, and when it was under 174, it broke the 45 degree angle from the 1921 low, placing it in a very weak position and indicating lower prices.

[46] In December, 1930, Steel declined to 135, on the angle of 2 X 1 from the low of 111 1/4 from January, 1927. This, being the halfway point of the life fluctuation, was a strong support point.

1931

[47] The stock rallied to 152 3/8 in February, 1931. This was the end of 360 months of the end of the first 30-year cycle from the date of incorporation. A change in trend of Steel nearly always comes in the month of February. The trend turned down at time when it went into the new cycle. On this last rally to 152 3/8, it failed to reach the 45 degree angle from 0 from May, 1918.

[48] In April, 1931, it broke the 135 bottom; broke the angle of 2 X 1 from 111 1/4 and the angle of 2 X 1 from 38 low in 1915; then broke the angle of 2 X 1 from the 1921 low, which put it in a very weak position. Dropping below the angle of 45 degrees coming down from the 150 low of November, 1929, and below the 45 degree angle from 150 of December, 1928, it was in such a weak position behind these 45 degree angles that it indicated very little rally.

[49] In June, 1931, low was 83 1/4. The price rested on the 45 degree angle coming up from 0 from the low of May, 1924, where the bottom was made at 95. Note that the 4 X 1 angle from 1904 and 1915 crossed near these levels, and the 4 X 1 angle coming up from 0 in September, 1929, crossed at 84, making this a strong support point for at least a rally.

In July, 1931, Steel rallied to 105 1/2, still weak on angles from the top and from the bottom.

[50] September, 1931, Steel broke 83, under the 2 X 1 angle from 0 in May, 1924, and under the 2 X 1 angle coming down from the 1929 top. As most all of the strong angles from the bottom were broken, it was in a very weak position.

[51] December, 1931, declined to 36 on a 45 degree angle from 0 in December, 1928, when the low was 150. At 36 it rested on the 45 degree angle coming down from the last low of 114 in June, 1925. This was 2 points under the 1915 low of 38 and was 242 months from 1011 low and 60 months from January, 1927 low. The stock held for a temporary rally to February, 1932, when it sold at 52 1/2.

1932

This was 12 months in a new 30-year cycle. Note 1902 top in January was 30 years back, and also 1912 top in January, 20 years back.

[52] The decline continued and in June, 1932, low was reached at 21 1/4, the same low as October, 1907. This was 34 months from 1929 top. At the time bottom was reached, it was under the 45 degree angle coming down from May, 1924, reached 0 in June, 1932, an indication for bottom and a change in trend. In view of the fact that Steel made extreme low in May, 1904, we would watch for change in trend in May and June, or when the cycle runs out. June, 1932, was 336 months from May, 1904, low and 26 months from April, 1930, top. Note May and June, 1912, low for a rally.

[53] September, 1932, U.S. Steel had a sharp rally to 52 1/2. This was the same high as the top of February, 1932, which it failed to cross. It was still in a weak position on angles from the top and a decline followed.

1933

[54] February, 1933, Steel declined to 23 1/4. This was a secondary low and a higher bottom than 1932; indicated good support. It was 42 months from September, 1929, or 1/2 a 7-year cycle, and 34 months from April, 1930, top and 24 months in the new 30-year cycle. In 1913, February was low for a small rally; in 1903, February was top for decline. Steel nearly always makes a change in trend in February. Looking back 7 years to 1926, you will find the low in March and April.

Note the 45 degree angle from in February, 1931, which was the end of the 30-year cycle, crossed at 24 in February, 1933. Therefore, the stock rested on this angle, which was a strong support angle.

[55] July, 1933, high 67 1/2. Note that in 1923 lows were made in July and August; in 1913, high in August; in 1903, new lows were made in July.

[56] October, 1933: Steel declined to 34 1/2. This was 49 months from September, 1929, top and 42 months from April, 1930, top. October, 1923, was low, 120 months or 10-year cycle. 1913 also low in October. 1903, low in November. Looking back 7 years to October, 1926, we find a low, and looking up the 5-year cycle,

in October, 1928, we find a low. Fifteen years back, or 180 months, September, 1918, was high. Therefore, there are many indications for a change in trend and bottom in October, 1933.

1934

[56] The stock started up and advanced to February, 1934, when it made a high of 59 3/4. Again we find the trend turning down and changing in February. The stock failed to reach the highs of July, 1933, a bearish indication and sign of lower prices. The top at 59 3/4 was under the 45 degree angle from the July 1933 top. Looking ahead we find that May, 1904 was the extreme low of the stock, therefore, we would expect the stock to be down until May, 1934. May, 1934, ended a 30-year cycle from the bottom. Also, look up 1914 and 1924 to tell how Steel should run in 1934.

September, 1934, low 29 1/2. This was 60 months or 5 years from the 1929 top and indicated a change in trend. Note October, 1924, was low, and in 1914 Steel was low in the month of November on the curb, the New York Stock Exchange being closed. In 1904 Steel started up in September. Look back 7 years to 1927; we find low in October.

1935

[57] January: Steel high at 40 1/2, a weak rally and still under the 45 degree angle from 1932 and 1933 lows. However, it crossed the angle of 2 X 1 coming down from February, 1934, top, but never closed above this angle, indicating a weak position. The trend turned down again in February, breaking the 2 X 1 angle from the bottoms of 1932 and 1933.

[58] March: Low 27 1/2, still higher than the bottoms of 1932 and 1933 and getting higher support indicating that it was in position to rally.

It was under the 4 X 1 angle from 21 1/4 low, but above the 45 degree angle from 0 in February, 1933, and on the 2 X 1 angle from July, 1933, high. Note in 1925 the low was made in March; in 1915 the low was made in February; in 1905 April was top. Note that it was 25 months from 1933 low and 33 months from 1932 and 49 months in the second 30-year cycle. Looking back 7 years, we find March, 1928, low. Now, we look at 1905, 1915, 1925 and find that they were all years of advancing prices for U.S. Steel.

[59] In April, 1935, U.S. Steel started up and crossed the angle of 2 X 1 from February, 1934, top and for the first time held above this angle. In July, 1935, high 44 against the 45 degree angle from July,1933, top. In August, Steel crossed the 45 degree angle from 1933 top and got back above the 45 degree angle from 0 from June, 1932. This indicated that it was in a stronger position. Note the 2 X 1 angle coming up from 0 at the time of the top in February, 1934. It rested on this angle in May and June, 1935;

also on the 45 degree angle from the low of June, 1932, and on a reaction in October, 1935, rested on the 2 X 1 angle from the low of March, 1935, and where the 45 degree angle from July 1933 coming down crossed the 2 X 1 angle from March 1935, low. The low price at this time (October, 1935) was 42. This showed that it was getting strong support on these angles.

In November, 1935, it advanced to 50. Note the 45 degree angle coming down from the last top of 105 1/2 made in July, 1931, will cross at 53 1/2 in November, 1935. Looking back at the previous cycles, we find 1905 high of the year in December; 1915 high of the year in December; 1925 high in November; 1928 low in December. Looking at 1930, 5 years back which was a bear year, however, we find the low in December. In 1935 Steel is following and repeating the bull cycles of 1905, 1915 and 1925."

METHOD FOR TRADING THE OVERNIGHT CHART

The Overnight Chart and the method for operating it is purely mechanical. You use no judgement, but simply follow rules and reverse your position when the Overnight Chart indicates it. If you buy and sell and use stop loss orders according to rules, this method will make a large amount of profits over a long period of time.

The Overnight Chart is taken from the daily high and low chart and the rule for keeping it is as follows:

As long as a stock makes higher bottoms each day, you move the Overnight Chart up, but the first day it makes 1/2 point or more under a previous day's bottom, you move the Overnight Chart down to this level, but always recording the highest top reached, before the Overnight Chart turns. Then as long as the Overnight Chart makes lower bottoms, you continue to move it down. Should it make a higher bottom and a lower top the same day, you would move it up to the top of that day because the Overnight Chart is based on bottoms. When there is a wide swing and the market runs up earlier in the day and makes a lower bottom, you first move your chart up to the top, or highest point reached during the day, and then bring it down to the lowest level. Then suppose the next day it makes a higher bottom, you move it up to the top of that day.

You can use the Resistance Levels in connection with the Overnight Chart, but the only rule that I use in connection with the trading record on U.S. Steel, which will follow, is the half-way point, or taking extreme low and extreme high or the last move and dividing it by two to get the gravity center or half-way point. Then buy or sell when this point is reached and protect it with a 1 point stop loss order. The other trading indications are according to the Overnight Chart.

When a stock reaches a new high where you have no Resistance Levels between a previous high and a previous low, you simply follow the Overnight Chart and reverse position when the rule indicates it.

You should watch the daily highs and lows on your daily chart around Permanent Resistance Levels as they will help you to determine a change in the major or minor trend on the Overnight Chart.

RULE 1: Buy or sell on double or triple tops or bottoms with a stop loss order 1 point above the top or 1 point under the bottom. This is the rule that I use. However, many times you will make more money if you use a 3 point stop loss order but by using a 1 point stop loss order most of the time, the stop will not be caught very often, and when it is, it will be time to reverse. The greatest advances and declines usually start from triple tops or bottoms, but remember that these triple tops or bottoms must be several weeks or several months apart to be of great importance. Triple tops or bottoms which are only a limited number of days apart, do not mean such big moves as those that occur weeks or months apart.

RULE 2: When a stock reaches the same top or bottom the 4th time, especially if it is several weeks or months apart, it nearly always goes through. Therefore, when you buy or sell the forth time at a bottom or top, you must always use a 1 point stop loss order over the top or under the bottom.

RULE 3: When the Overnight Chart makes tops or bottoms on Resistance Levels like the 1/2, 2/3, and 3/4 points, you should buy or sell with a stop loss order 1 or 2 points under these exact Resistance Levels. As a general rule, the stop should be 1 point.

RULE 4: When your stop loss order is caught, it indicates that the Overnight Chart has reversed, so you should reverse position and double up every time it is caught. You will make a great deal more money trading in this way, as will be shown by the trading operations which follow on U.S.Steel. In my trading, the only place where I do not reverse position, that is, double up when the stop loss order is caught, or the trend changes is where there is no second top or bottom close enough for me to place a stop loss order if I reverse position. As a general rule, I place the stop loss order 1 point above a previous top or 1 point under a previous bottom.

RULE 5: The rule for pyramiding is to sell or buy half as much as your trading unit every 3 to 5 points apart, determining the distance according to the activity of the stock and according to previous Resistance Levels which are broken. Your 3rd trade in a pyramid should be one-half of the amount of your 2nd trade, your 4th one-half of the 3rd, and so on. In this way, you take your greatest risk first, then when you make the second, third and forth trades, you are reducing your trading units, therefore, when a stop loss order is caught, your loss will be small on the last trade in the pyramid and large on the ones that you bought or sold the most of the first. Suppose you are pyramiding a stock when it has declined or advanced 20 or 30 points and has a fast move up or down without making any change on the Overnight Chert. In nearly every case before the trend changes, the Overnight Chart will make a reverse move and allow you to place your stop loss order at least 3 to 5 points away from the bottom or top, but when you have a very large profit and the market has a sharp move one way or the other, and you have a pyramid, you do not want to lose any more of your profits than you can help. In this case, I usually pull my stop loss order down 5 points from the low level each day, or if on the up side, place it up 5 points under the high level, then when the market makes the first reverse move of 5 points, I am out on stops on all of the pyramiding trades.

RULE 6: For very active, fast moving stocks, especially when they are at high levels, you should wait for a change in trend on trend on the Overnight Chart before reversing position. By a change in the Overnight Chart, I mean wait until it breaks a previous low level,or crosses a previous high level, in case you are operating on the down side.

RULE 7: After any big advance or decline, reverse position when Overnight Chart shows a change in trend, that is, double up on changes and go with the trend. The big money is made by doing with the trend. That is why every time the trend changes or a stop loss order is caught, we reverse position. If the trend has changed and it is time to sell out longs, it is also time to go short, and vice-versa.

For example, In fast moving markets, like the panic of October and November, 1929, when you pyramid on active stocks and make a large amount of money, if you have very large profits, you should down with a stop loss order above 10 points away from the market. Then, after a severe decline, reduce stop loss order, placing it about 5 points above the low level, because when a market is moving as fast as this, you should not wait for the Overnight Chart to show a change in trend by crossing a previous top before changing position. In fast moving markets you would also watch for the market to stop around important half-way points. For example, U.S. Steel at 150 had reached the half-way point from 38 to 261 3/4. You would not wait until the Overnight Chart showed a change but when Steel got around 150, you would cover shorts and buy with a stop at 149, or if you use the 3 point rule, place stop at 147. Suppose Steel had broken this 150 level. When your stop loss order was caught at 149 or 147, whichever was used, you would have gone short.

RULE 8: Watch the daily, weekly, and monthly closing prices. When a stock is active and closes for 3 days, 3 weeks, or 3 months around the same price, then the trend changes, it will usually go a considerable distance in the direction in which it starts. However, it is not necessary to depend on this rule at all in connection with the Overnight Chart. I am only giving it to help those who study the daily, weekly and monthly charts.

RULE 9: In a very weak or very strong market, watch for the first advance of 3 full points from any low level. By three full points, I mean for example, from 100 low, a rally to 103 would be 3 full points. Suppose the low was 1/2. We would not count three full points until the stock rallied to 103. Reverse this rule for a stock when it is advancing. Suppose it advances to 150 7/8 and has not had a 3 full point reaction for some time. Then if it declined to 147, I would consider it a 3 full point reaction and an indication that the trend was reversing. In this case, suppose the stock only declined to 147 1/2 or even to 147 1/4. We would not count it a full 3 point reaction, because full points are based on even figures.

No matter at what point or at what price you begin trading according to this method, you must follow the rules and not risk more than 3 points on any one trade, then after that use the Overnight Chart and make your stop loss orders 1 point away from the top or bottom which I always do in my trading example which follows on U.S. Steel. Then when the stop loss order is caught, buy or sell double the amount, reversing the position. When you cover shorts on a stop loss order, you buy and go with the trend. In the same way you sell out longs on a stop loss order, you reverse position and go short the same amount which keeps you with the trend.

In my trading, I do not use or take advantage of other rules which I know might help me at points. I make many trades when I know there is going to be a loss just to demonstrate that the method will work over a long period of years and make money by reversing position every time and using stop loss orders and, at the same time, following the capital rule and not over trading, always allowing 3000 dollars capital for each 100 shares traded in. If you start with 300 dollars capital, then trade in ten share lots and never risk more than 3 points, or 30 dollars, on each of your initial trades. Do not increase your trading unit on initial trades until your capital has increased so that the loss will be only 10 percent of your capital, if the loss comes.

In pyramiding, it is different. When you make the 2nd or 3rd trade, you have a profit already and are risking part of your profits, but always keep these risks protected with stop loss orders on a pyramid are caught, your total loss will not exceed 10 percent of your capital. Anyone who will follow this rule over a long period of years will not only keep his capital, but will make a fortune. This can be demonstrated on any active stock. Use as little human judgement as possible and you will make better success in trading. The Mechanical Method beats human guesswork, because it reverses at the time the trend reverses and doubles up and goes with the trend, while the man who is guessing or using human judgement will wait. You must have machine-like action in order to succeed, and must buy or sell according to the rules, regardless of what you think or hope. This is exactly what I always do in the trading operations which follow on U.S. Steel.

U.S. Steel Trades According To Overnight Chart - 1915 -1930

This trading plan requires $3,000 to start with, to trade in 100-share lots. My rule is never to risk more than 3 points or any one trade. I protect all trades with stop loss orders. Follow the rules for Resistance Levels and the rules for using the Overnight Chart. When I pyramid, or buy or sell a second lot, I limit my risk so that I will not lose more than 10% of my original capital. In other words, when I buy or sell a second lot, I place stop so that my loss will not exceed $300.00.

The following operations are based on trading according to the Overnight Chart and the use of Resistance Levels to determine buying and selling points:

1915

February 1st, low 38, February 3rd, high 41 1/2 - a 3 point rally indicated a buying point. Either buy at market or on a reaction. We buy 100 shares at 41. On February 5th, it declined to 38 3/4, then crossed 41 1/2, the top of February 3rd, and turned Overnight trend up. Stop would now be at 36 1/2 or 3 points under 39 1/2. Trend continued up to 45 on February 13th, then declined to 40 1/2 on February 24th, making a higher bottom than February 5th. Raise stop to 38 1/2 or 2 points under 2 bottoms close together.

March 8th, high 46, then made 3 bottoms around 43 1/2 to 44 1/4 on March 5, 13 and 18. Here raise stop to 42 1/2 or one point under three bottoms. Then we buy more at 47 when it goes one point above top at 46. Trend continues up to 49 3/4 on March 29th; again made three bottoms around 47 3/4 to 48 1/4; raise stop to 46 3/4. Then we buy more at 51 and raise stop on three lots to 48. The advance continued to 58 on April 10th, reacted to 55 1/4 on April 13th. We raise stop to 52 1/4 or three points under.

April 19th made top 60 3/4, reacted to 56 3/4 on April 24th. Raise stop to 55 1/4, last bottom. April 26, high 59 1/4, April 27th, low 57, a third higher bottom. Raise stop to 56 on all three lots. April 29 high 60 5/8, just 1/8 under top of April 19th. April 30th, low 58 1/2. Raise stop to 57 1/2.

May 3rd advanced to 60 3/4, the third top around same level, where we should either sell out and go short with stop at 63 3/4 or leave stop at 57 1/2. We sold on stop at 57 1/2.

1st purchase:	100 at 41,	sold at 57 1/2-	profit- 16 1/2 points
2nd purchase:	100 at 47,	sold at 57 1/4-	profit- 10 1/2 points
3rd purchase:	100 at 51,	sold at 57 1/2-	profit- 6 1/2 points

or a total of...........33 1/2 points
on 100 shares...........$3,350.00
Deduct $100.00 for commission, tax and interest... $100.00
Net gain................$3,250.00

Then we increase trading to 200 shares, but loss must be limited to $600.00, or three points on each 100 shares. This would give us 200 short at 57 1/2, with stop at 60 1/2.

Decline followed, broke three bottoms made April 24, 27 and 30. We sell 200 shares more at 54 1/3. Decline continued to 48 1/4, where there were three bottoms March 26th and 31st and April 1st. Rule says, buy the fourth time with one point stop. We covered 300 shares short at 48 1/2 and bought 200 at 48 1/2 with stop at 46 3/4, which was one point under bottom of March 26th and April 1st. The profits are as follows:

Sold 200:	at 57 1/2,	closed at 48 1/2-	profit....$1,800.00
Sold 200:	at 54 1/4,	closed at 48 1/2-	profit....$1,150.00
			Total.....$2,950.00

Commission and taxes.................................$116.00
Net profit.............$2,834.00
Previous capital and profits $6,250.00
Total capital..........$9,084.00

This will allow 300 shares as a trading unit with risk limited to $900.00 on each trade. We bought 200 at 48 1/2 when we covered shorts, then we have 100 more to buy later.

The stock advanced to 55 1/4 on May 12th. If we were watching the resistance level of 54 1/2 or 1/2 from 60 3/4 to 48 1/4, we would expect top and a reaction and could have sold out longs and gone short at 54 1/2 with stop at 57 1/2, but we waited for a change on the Overnight Chart.

May 14th, low 49 3/4. Here we buy 100 more at 50 1/2, then make stop on 300 at 48. The advance was resumed on May 17th made 53 1/2, then reacted to 51 3/4, then turned trend up again. We would now raise stop to 49 3/4, the last bottom.

May 24th, high 56 1/4 and crossing 54 1/2, the 1/2 point, the second time indicated higher.

May 26th and June 1st reacted to 53 1/4 and made double bottom. Raise stop to 50 3/4 or one point under previous low level when it crossed 56 1/4, last top, buy 200 more at 56 1/2 and raised stop on all trades to 52 1/4, one point under last double bottom. June 4th the stock advanced to 64 1/8. June 9th declined to 56 3/4. Holding above 56 1/4, the 1/2 point from last low of 48 1/4 to high of 64 1/8, was a sign of strong support and showed that the main trend was up because the stock had gone three points above the triple tops made on April 19th and 29th and May 3rd.

From June 9th, a rally followed to June 12th, when the high was 61 1/4. We now raise stops to 55 3/4 or one point under low of June 9th.

June 14th declined to 59, then raise stop on all trades to 58. This stop was never caught. The stock advanced to 61 3/4 on June 22nd, then after a series of lower tops and bottoms, declined to 58 1/4 on July 7th, then rallied to 59 1/4 on July 9th, and declined same day to 58 1/4, making a double bottom from which advance was resumed and on July 17th reached 65 1/8, reacted to 62 1/2 on July 20th, rallied to 62 1/8 on the 26th and declined same day to 62 3/4, making a double bottom again. Then it went to new high and crossed 66 3/8, the 1/2 point from 94 7/8 to 38. We bought more at low of July 26th. We buy 200 more at 72.

August 10th: high 76 3/4
August 11th: declined to 73 5/8
August 12th: advanced to 75 1/2
August 14th: declined to 73 3/8
August 18th: advanced to 77 5/8

We now raise stop on all trades to 72 3/8, or one point under the last bottom at 73 3/8. The stop was caught and we sold short 400 shares at 72 3/8.

The account now stands as follows:

```
Bought 200:  at 48 1/2- closed at 72 3/8- profit..$ 6,725.00
Bought 100:  at 50 1/2- closed at 72 3/8- profit..$ 2,162.50
Bought 200:  at 56 1/2- closed at 72 3/8- profit..$ 3,125.00
Bought 200:  at 67    - closed at 72 3/8- profit..$ 1,075.00
Bought 200:  at 72    - closed at 72 3/8- profit..$13,087.50
                          Less loss of 3/8 on 200.$    75.00
Less commissions and taxes........................$   225.00
                          Net gain................$12,787.50
                          Previous capital........$ 9,084.00
                          Operating capital.......$21,871.50
```

This would give a limit of 700 shares as a trading unit.

Sold 400: short at 72 3/8
Sold 300: short at 69 3/8

Always calculate the 1/2 point of a previous move.

Last low, 58 1/8, July 9th to 77 5/8 high, August 18th, making 1/2 point at 67 7/8. August 23rd, declined to 67 3/4. Here we cover shorts and buy 700 longs at 68 1/2, stop 64 7/8. However, a stop at 66 7/8, just one point under 1/2 point, would have held, as low of 67 3/4 was not reached again.

Our account stands as follows:

```
Sold 400: at 72 3/8- closed at 68 1/2- profit.....$ 1,750.00
Sold 300: at 69 3/8- closed at 68 1/2- profit.....$   252.50
                           Total..................$ 2,002.50
Less commissions and taxes........................$   175.00
                           Previous capital.......$21,871.50
                           Operating capital......$23,698.00
```

We continue with 700 shares as trading units. We are now long of 700 shares bought at 68 1/2 with stops 64 7/8. We buy 300 at 72.

August 27th: advanced to 77
September 1st: declined to 73 3/4
September 2nd: rallied to 76 3/4

Here we raise stop to 72 3/4, just one point under September 1st low.

September 10th: advanced to 76 1/4
September 11th: declined to 73 3/4
September 14th: rallied to 76
September 17th: declined to 74 1/4

This makes five bottoms around 74 1/4 to 73 3/4, a sure indication that stop should be at 72 3/4.

September 27th, advanced to 70 3/4, getting above all tops since August 17th. We bought 300 at 78 1/2, stop 75 1/2.

October 1st:	high 81 3/4
October 8th:	low 76 3/4- advanced resumed
October 19th:	high 87 1/4
October 20th:	low 85 1/2
October 21st:	high 87 5/8- stop 84 1/2
October 26th:	low 85 1/4- high 87 1/4 (the third top around same level)

We could have sold out but we assume stop was caught at 84 1/2, and we went short 700 at 84 1/2.

Our account now reads as follows:

Bought 700: at 68 1/2- sold at 84 1/2- profit....	$11,200.00
Bought 300: at 72 - sold at 84 1/2- profit....	$ 3,750.00
Bought 300: at 78 1/2- sold at 84 1/2- profit....	$ 1,800.00
Total profit...........	$16,750.00
Less commissions and taxes........................	$ 325.00
	$16,425.00
Previous capital.......	$23,698.00
Operating capital......	$40,123.00

We can now raise trading unit to 1000 shares. We are short 700 at 84 1/2. The last low, October 6th, was 76 3/4, high October 21st, 87 5/8. It makes 1/2 point, 82 1/8. October 29th, the stock declines to 82 1/4. Note October 16th low of 82 1/4. Here we could cover shorts and buy with a stop at 81 1/4.

Our account now stands at:

Sold 700: at 84 1/2- closed at 82 1/2- profit....	$ 1,400.00
Less commissions and taxes........................	$ 175.00
	$ 1,225.00
Previous capital.......	$40,123.00
Operating capital......	$41,348.00

We now have 1000 shares bought at 82 1/2.

November 1st:	advanced to 883/8
November 3rd:	low 86
November 4th:	high 88

Raise stop to 85, one point under November 3rd low. The stop was caught, and we sold short 1000 at 85.

Our account now stands:

Bought 1000: at 82 1/2- sold at 85- profit......$ 2,500.00
Less commissions and taxes.......................$ 250.00
$ 2,250.00
Previous capital......$41,348.00
Operating capital.....$43,558.00

Short 1000 at 85, stop at 88 3/8. The stock declines to 83 5/8 on November 9th; then rallies on November 12th to 88 3/8; declines on November 16th and 20th to 86 1/4; November 26th high 88 1/4, December 2nd, low 84 1/2. December 7th high 88 1/4, making the same level five times. Our stop should be 89 1/4. December 13,17 and 21 made lows of 85 1/4 to 84 7/8, higher than previous bottoms, and our stop should have been reduced to 87 1/4, one point above December 20th high. This stop was caught, and we would reverse position and buy 1000 at 87 1/4.

Account now stands:

Sold 1000: at 85- closed at 87 1/4- loss........$ 2,250.00
Less commissions and taxes.......................$ 250.00
Net loss..............$ 2,500.00
Capital...............$43,558.00
Net operating capital.$41,058.00

We have 1000 bought at 87 1/4. December 27th, advanced to 89 1/2; December 29th, low 86 3/4; December 31st high 89 1/2, a double top- raise stop to 85 3/4. This double top near 90, a strong resistant level, would be the place to sell out and go short, but we stay to see if overnight trend turns down. Stop is caught at 85 3/4, and we sell 1000 short at 85 3/4.

Account now stands as follows:

Bought 1000: at 87 1/4- closed at 85 3/4-loss...$ 1,500.00
Less commissions and taxes.......................$ 250.00
Total.................$ 1,750.00

Subtracting $1750.00 from $41,058.00 leaves a balance of $39,308.00 and 1000 short at 85 3/4.

1916

January 24th, declined to 82 1/4, same low as October 16th and 29th, 1915. We cover shorts at 82 1/2 and buy 1000 at 82 1/2.

Account now stands:

Sold 1000: at 85 3/4- closed at 82 1/2- profit..$ 3,250.00
Less commissions and taxes.......................$ 250.00
$ 3,000.00
Capital...............$39,308.00

Operating balance.....$42,308.00

Bought 1000: at 82 1/2- stop 81 1/2

January 26th: high 86
January 27th: low 82 3/4
January 28th: high 84 1/4

Raise stop to 81 3/4, one point under January 27th low. This stop was caught and we go short 1000 at 81 3/4.

Account now stands:

Bought 1000: at 81 1/2- sold at 81 3/4- even....$.........
Capital...............$42,308.00

Short 1000: at 81 3/4- stop at 85 1/4

January 31st: low 79 7/8
February 4th: high 84 3/4
February 5th: low 82 1/4
February 10th: high 85 5/8

The stop caught and we buy 1000 at 85 5/8.

The account now stands at:

Sold 1000: at 81 3/4- closed at 85 5/8- loss....$ 3,787.50
Operating balance.....$42,308.00
New balance...........$38,520.50

Bought 1000: at 85 5/8- stop 81 1/4

February 17th and 24th, made lows at 82 1/2 and 82 3/8. We raised stop to 81 1/2. Stop caught and we go short 1000 at 81 1/2.

Account stands:

Bought 1000: at 85 5/8- sold at 81 1/2- low.....$ 4,125.00
Less commissions and taxes......................$ 250.00
Operating balance.....$38,520.00
New balance...........$34,145.00

1000 short: at 81 1/2

March 1st declines to 79 3/4, same low as January 31st. We cover shorts and buy 1000 at 80 1/4.

Account now stands:

Sold 1000: at 81 1/2- closed 80 1/4- profit....$ 1,250.00

Less commissions and taxes........................$ 250.00
Net...................$ 1,000.00
Added to capital......$39,520.00

With 1000 bought at 80 1/4, stop at 79 1/4. March 17th, high 87 1/4, March 22nd, low 84. We raise stop to 83. April 4th, high 86. April 8th and March 22nd, low 83 3/4. April 10th, high 85 1/4. Decline follows. Stop is caught at 83 and we go short 1000.

Account now stands:

Bought 1000: at 80 1/4- sold at 83- profit.......$ 2,750.00
Less commissions and taxes........................$ 250.00
Net profit.............$ 2,500.00
Added to capital.......$42,020.00
1000 short at 83

April 22nd declines to 80 and we cover at 80 1/4 and buy 1000 because this is same bottom as January 31st and March 1st. We protect with stop 79 1/4, this being a triple bottom.

April 25th, high 84, April 26th, low 80 3/8, a higher bottom. May 1st, high 84 1/4, May 5th, low 801/2, a slightly higher bottom. From high of 89 1/2 on December 31, 1915 to low of 79 3/4, March 1st, 1916, makes 1/2 point 84 5/8, and making 85 5/8 would indicate higher.

May 25th, high 86 5/8 and last low on the 17th was 84. Therefore, we raise stop to 83. The stock declines to 83 5/8 on June 2nd. June 12th, advances to 87 1/4. June 12th, low 86. June 14th, high 87. We raise stop to 85, which is caught, and we go short 1000 at 85.

Account stands:

Bought 1000: at 80 1/4- sold at 85- profit.......$ 4,750.00
Less commissions and taxes........................$ 250.00
Net...................$ 4,500.00
Added to capital.......$46,520.00
1000 short- at 85- stop at 88

June 27th declines to 82 3/4 and as top on June 26th was 84 1/4 we reduce stop to 85 1/4, which is caught, as we buy 1000 at 85 1/4.

The account now stands:

Sold 1000: at 85- closed 85 1/4- loss(w/ comm)...$ 500.00
Added to capital.......$46,020.00
Bought 1000: at 85 1/4- stop at 81 3/4

July 6th, high 87 1/4, July 14th, low 83 1/4, we raise the stop to 82 1/4. June 24th, high 87 1/4, July 25th, low 85 1/4, we raise stop to 82 1/4. July 27th, August 2nd and 5th, makes low 85 3/4 and 86, and we raise stop to 84 3/4. A big advance follows and at 90 1/2 we buy 300 more because the stock has gone one point into new high after holding for nine months between 89 1/2 and 79 3/4. August 17th, high 92 5/8, August 18th, low 91. We raise stop on all trades to 90 and at 94 buy 300 more. August 23rd, high 99 1/2, the highest in it's history. August 24th, low 96 3/4. We raise stop to 95 3/4. August 25th, high 99 1/4. August 28th, low 95 3/4. Catches stop and we go short 1000 at 95 3/4.

Account stands:

Bought 1000: at 85 1/4- sold at 95 3/4- profit...$10,500.00
Bought 300: at 90 1/2- sold at 95 3/4- profit...$ 1,575.00
Bought 300: at 94 - sold at 95 3/4- profit...$ 525.00
Less commissions and taxes.........................$ 400.00
Net profit.............$12,200.00
Capital................$46,030.00
New balance............$58,220.00
1000 shares: short at 95 3/4

We can now increase trading unit to 1200 shares. August 30th, low 95 1/4. The high on the 29th was 97, so we make stop to 97. August 31st stop is caught and we buy 1200 at 97.

Account now stands:

Sold 1000: at 95 3/4- closed at 97- loss.........$ 1,500.00
New balance............$56,720.00
1200 bought: at 97

August 31st advances to 99 3/8 for the third time and can't go through 100, so we sell out at 99 and go short 1200 at 99.

Account now stands:

Bought 1200: at 97 -sold at 99- net profit......$ 2,100.00
New balance of capital..$58,820.00
1200 short: at 99

September 1st declines to 95, getting only 1/4 under low of August 30th. We reduce stop to 99, which is caught, but we wait to buy stock until stock can make new high and go through 100- a very important resistance level.

Account stands:

Sold 1200: at 99- closed at 98- profit..........$ 900.00
New operating capital...$59,720.00

The advance continues, and at 100 1/2 we buy 1200 with stop 97 1/2 and at 105 1/2 we buy 600 more, and at 110 1/2, 600 more. The lows on September 19th and 20th were 107, so we raised stop to 106 on all trades. At 115 1/2 we buy 300 more. September 25th, high 120, a Resistance Level. September 26th, low 113 3/4. We raise stop on all trades to 112 3/4. September 29th, high 120 1/2. September 30th, low 116 1/4. We raise stop to 115 1/2. October 2nd, 4th, and 5th makes tops at 118 5/8 to 118 3/4 and low on October 4th was 117, so we raise stop to 116, which is caught, and we go short 1200.

Account now stands:

Bought 1200: at 100 1/2- sold at 116- profit......	$18,600.00
Bought 600: at 105 1/2- sold at 116- profit......	$ 6,300.00
Bought 600: at 110 1/2- sold at 116- profit......	$ 3,300.00
Bought 300: at 115 1/2- sold at 116- profit......	$ 150.00
Less commissions and taxes........................	$ 675.00
Previous capital........	$59,720.00
Operating capital.......	$87,395.00

1200 short: at 116- with stop at 119

We can now increase trading to 1500 shares.

A decline follows and we sell 600 more at 111. October 9th, low 108, October 10th, high 113. Reduce stop to 113. October 14th, low 108, same as October 9th, a double bottom. We figure from last low September 1st at 95 to high 120 1/2, September 29th, and find 1/2 point is 107 3/4, so we cover shorts at 108 1/2 and buy 1500 with stop 106 3/4.

Account stands:

Sold 1200: at 116- closed at 108 1/2- profit.......	$ 9,000.00
Sold 600: at 111- closed at 108 1/2- profit.......	$ 1,500.00
Less commissions and taxes........................	$ 950.00
Net profit..............	$ 9,650.00
Previous balance........	$87,395.00
Operating capital.......	$97,045.00

1500 bought: at 108 1/2

We bought 700 more at 114. October 23rd, high 121 3/4. Bought 400 more at 121 1/2, because it was a new high. October 26th, low 117 1/4. Raised stop on all trades to 116 1/4, November 2nd, high 122 1/4. November 4th, low 119 3/4. Raised stop to 118 3/4. November 9th, low 122 1/2, raised stop to 121 1/2. Stops were caught, and we go short 1500 at 121 1/2.

Account stands:

Bought 1500: at 108 1/2- sold at 121 1/2- profit..	$ 9,500.00
Bought 700: at 114 - sold at 121 1/2- profit..	$ 5,250.00

Bought 400: at 121 1/2- sold at 121 1/2- even....$.........
Less commissions and taxes.........................$ 650.00
Net profit.............:$97,045.00
New operating capital..$121,145.00
1500 short: at 121 1/2

We can now be very conservative and increase trading to 2000 shares and should we have ten consecutive losses of three points each, we would still have half our capital left to operate with, and ten consecutive losses are highly improbable.

(We are going to bypass the years 1917 through 1927, as those years are a repetition of what has been written, so far. Starting 1928, the operating capital stood at $1,634,177.50.)

1928

We buy 2000 at 140 1/2, and later buy 1000 at 144 1/2 and 500 at 149 1/2. March 22nd and 26th high 152. We raise stop to 149. Stop caught, and we sell short 2000 at 149, April 2nd and 11th, low 145, same low as March 14th and 20th. We reduce stop to 148, although, could have covered against double bottom. Stop caught. We buy 2000 at 148. April 12th, high 154. We raise stop to 151. Stop was caught, and we sell short 2000 at 151. April 24th, low 143 3/4. April 27th, high 147. We make stop at 148. Stop caught. We buy 2000 at 148. May 11th, high 150 3/4. We make stop at 147 3/4. The stop was caught, and we go short 2000 at 147 3/4, and later sell 1000 at 142 3/4, and 500 at 137 3/4. June 11th, low 132 5/8. Last low, June 21st at 136 1/4. We make stop 137 1/4. Stop was caught, and we buy 2000 at 113 1/4. July 9th, high 142. We make stop 139. Stop caught, and we go short 2000 at 139. July 17th, low 134. We make stop 137. The stop was caught.

We buy 2000 at 137 and later buy 1000 at 142, 500 at 147 and 300 at 152. September 17th, high 160 3/8. We make stop 157 3/8. Stop was caught, and we sell short 2000 at 157 3/8. September 21st, low 155. We make stop at 158. The stop was caught, and we buy 2000 at 158. Later, buy 1000 at 162. October 15th, high 166. We make stop 163. Stop caught. We go short 2000 at 163. October 26th, low 159 1/8. We make stop 162 1/8. Stop was caught, and we buy 2000 at 162 1/8, and later buy 1000 at 167. November 16th, high 172 1/2, and we make stop at 169 1/2. Stop was caught, and we go short 2000 at 169 1/2. Later sell 1000 at 164 1/2, 500 at 159 1/2 and 300 at 154 1/2. December 17th, low 149 3/4 and December 8th, low was 150 1/4. Also note, August 23rd and 28th lows were 149 1/4 and 150 1/2. These bottoms give us an indication to cover shorts around 150 and buy; besides from the last low of 132 3/8 on June 25th to the high, 172 1/2 on November 16th made 1/2 point at 152 1/2 and 3 point stop was never caught. After low of 149 3/4 on December 17th, we made stop 152 3/4. Stop was caught, and we buy 2000 at 152 3/4. Later buy 1000 at 157 3/4, 500 at 162 3/4, 300 at 167 3/4, 200 at 172 3/4 and 100 at 177 3/4.

1929

On January 22, 1929, high 190 1/4. We make stop 187 1/4. Stop caught. We go short 2000 at 187 1/4. January 24th, low 183 1/2. We make stop at 187 1/2. January 25th, high 192 3/4. We make stop 189 3/4. Stop was caught, and we sell 2000 at 189 3/4. January 30th, low 179 1/2. We make stop 182 1/2. Stop was caught. We buy 2000 at 182 1/2. February 2nd, high 188. Make stop 185. Stop caught. We go short 2000 at 185, and later sell 1000 at 180. February 8th, low 171 1/8. Make stop 174 1/8. Stop caught. We buy 2000 at 174 1/8. February 13th, high 180. We make stop 177. Stop caught. We sell 2000 at 177 and later sell 1000 at 172. February 16th, low 168 1/4. We make stop 171 1/4. Stop was caught, and we buy 2000 at 171 1/4. Later we buy 1000 at 176 1/4, 500 at 181 1/4, 300 at 186 1/4, and 300 at 190 1/4. March 1st, high 193 3/4. We make stop at 190 3/4. Stop caught.

We go short 2000 at 190 3/4 and sell 1000 at 185 3/4. March 6th, low 180 1/2. We make stop 183 1/2. Stop was caught and we buy 2000 at 183 1/2. March 8th, high 187 1/4. We make stop 184 1/4. Stop was caught, and we go short 2000 at 184 1/4. March 11th, low and we buy 2000 at 184 1/4. March 28th, high 183 3/4. Make stop 180 3/4. Stop caught.

We go short 2000 at 180 3/4. April 1st, low 176 1/4. We make stop 179 1/4. Stop caught. We buy 2000 at 179 1/4 and later buy 1000 at 184 1/4. April 5th, high 189. We make stop 186. Stop caught. We go short 2000 at 186. April 9th and 17th, low 183 3/4. Make stop 186 3/4. Stop caught. We buy 2000 at 186 3/4. April 30th, high 190 1/2. We make stop 187 1/2. Stop caught. We go short 2000 at 187 1/2. Later, sell 1000 at 182 1/2, 500 at 177 1/2, 300 at 172 1/2 and 200 at 167 1/2. May 31st, low 162 1/2. We make stop 165 1/2. Stop was caught, and we buy 2000 at 165 1/2. Later, buy 1000 at 170 1/2, 500 at 175 1/2, 300 at 180 1/2, 200 at 185 1/2, 100 at 190 1/2.

In the earliest part of July, the stock crosses 194, the highest in history, and not having broken an overnight bottom since the low of 162 1/2 shows strong up trend. As we have 30 points' profit in the first purchase at 165 1/2, we start a new pyramid and buy 2000 more at 195 1/2. Buy 1000 at 200 1/2. July 11th, low 197 1/2. We raise stop on all purchases to 196 1/2. The advance continues, and we buy 1000 more at 205 1/2. July 20th and 24th high 209 3/4 and 210. July 22nd, 24th and 29th made lows at 204 1/2. We raise stops on all trades to 203 1/2. Stops were not caught. We buy 500 more at 210 1/2, 300 at 215 1/2, 200 at 220 1/2, and 100 at 225 1/2. August 9th, the last low was 213 1/2. We raise stops on all trades to 212 1/2. The advance continues with no change in trend on the Overnight Chart. August 14th, high 245. August 15th, low 235 5/8. We raise stop on all trades to 234 5/8. August 19th, low 237 5/8. We raise all stops to 236 5/8.

The rule to follow when you have big profits on a double pyramid is, do no guessing; wait until the Overnight Chart closes your trades by catching a stop one point under a previous low or follow up with a stop 10 points under each day's high level. This rule is to be applied only in active fast markets. For example, from August 14th high to August 15th low there was decline of 9 3/8 points. Therefore, 10 points from the next extreme high level would indicate that the trend was getting ready to turn down.

August 24th, high 260 1/2. August 29th, low 251 1/2, just 9 points decline, and would not catch a 10 point stop. We raise all stops to 250 1/2. September 3rd, high 261 3/4, and a stop 10 points down would be 251 3/4. We sell out all long stock at 251 3/4.

The following statement covers all trades from March, 1928 to September 5, 1929:

	DEBIT	CREDIT
March, 1928 balance................................		$1,634,177.50
Bought 2000: at 140 1/2-closed at 149		17,000.00
Bought 1000: at 144 1/2-closed at 149		4,500.00
Bought 500: at 149 1/2-closed at 149	250.00	
Sold 2000: at 149 -closed at 148		2,000.00
Bought 2000: at 148 -closed at 141	14,000.00	
Sold 2000: at 141 -closed at 148	14,000.00	
Bought 2000: at 148 -closed at 147 3/4	500.00	
Sold 2000: at 147 3/4-closed at 137 1/4		21,000.00
Sold 1000: at 142 3/4-closed at 137 1/4		5,500.00
Sold 500: at 137 3/4-closed at 137 1/4		250.00
Bought 2000: at 137 1/4-closed at 139		3,500.00
Sold 2000: at 139 -closed at 137		4,000.00
Bought 2000: at 137 -closed at 157 3/8		40,750.00
Bought 1000: at 142 -closed at 157 3/8		15,375.00
Bought 500: at 147 -closed at 157 3/8		5,187.50
Bought 300: at 152 -closed at 157 3/8		1,612.50
Sold 2000: at 157 3/8-closed at 158	1,250.00	
Bought 2000: at 158 -closed at 163		10,000.00
Bought 1000: at 162 -closed at 163		1,000.00
Sold 2000: at 163 -closed at 162 1/8		1,750.00
Bought 2000: at 162 1/8-closed at 169 1/2		14,750.00
Bought 1000: at 167 -closed at 169 1/2		2,500.00
Sold 2000: at 169 1/2-closed at 152 3/4		33,500.00
Sold 1000: at 164 1/2-closed at 152 3/4		11,750.00
Sold 500: at 159 1/2-closed at 152 3/4		3,375.00
Sold 300: at 154 1/2-closed at 152 3/4		525.00
Bought 2000: at 152 3/4-closed at 187 1/4		69,000.00
Bought 1000: at 157 3/4-closed at 187 1/4		29,500.00

	DEBIT	CREDIT
Bought 500: at 162 3/4-closed at 187 1/4		12,250.00
Bought 300: at 167 3/4-closed at 187 1/4		5,850.00
Bought 200: at 172 3/4-closed at 187 1/4		2,900.00
Bought 100: at 177 3/4-closed at 187 1/4		950.00
Sold 2000: at 187 1/4-closed at 187 1/4	500.00	
Bought 2000: at 187 1/2-closed at 189 3/4		4,500.00
Sold 2000: at 180 3/4-closed at 182 1/2		24,500.00
Bought 2000: at 182 1/4-closed at 185		5,000.00
Sold 2000: at 185 -closed at 174 1/4		21,500.00
Sold 1000: at 180 -closed at 174 1/4		5,750.00
Bought 2000: at 174 1/8-closed at 177		5,750.00
Sold 2000: at 177 -closed at 171 1/4		11,500.00
Sold 1000: at 172 -closed at 171 1/4		750.00
Bought 2000: at 171 1/4-closed at 190 3/4		39,000.00
Bought 1000: at 176 1/4-closed at 190 3/4		14,500.00
Bought 500: at 181 1/4-closed at 190 3/4		4,750.00
Bought 300: at 186 1/4-closed at 190 3/4		1,350.00
Bought 300: at 191 1/4-closed at 190 3/4	150.00	
Sold 2000: at 190 3/4-closed at 183 1/2		14,500.00
Sold 1000: at 185 3/4-closed at 183 1/2		2,250.00
Bought 2000: at 183 1/2-closed at 184 1/4		1,500.00
Sold 2000: at 184 1/4-closed at 183 1/2		1,500.00
Bought 2000: at 183 1/2-closed at 187 3/4		8,500.00
Bought 1000: at 188 1/2-closed at 187 3/4	750.00	
Sold 2000: at 187 3/4-closed at 174 1/2		26,500.00
Sold 1000: at 182 3/4-closed at 174 1/2		8,250.00
Sold 500: at 177 3/4-closed at 174 1/2		1,750.00
Sold 300: at 172 3/4-closed at 174 1/2	525.00	
Bought 2000: at 174 1/2-closed at 180 3/4		12,500.00
Sold 2000: at 180 3/4-closed at 179 1/4		2,500.00
Bought 2000: at 179 1/4-closed at 186		13,500.00
Bought 2000: at 184 1/4-closed at 186		1,750.00
Sold 2000: at 185 -closed at 186 3/4		1,500.00
Bought 2000: at 186 3/4-closed at 187 1/2		1,500.00
Sold 2000: at 187 1/2-closed at 165 1/2		4,400.00
Sold 1000: at 182 1/2-closed at 165 1/2		17,000.00
Sold 500: at 177 1/2-closed at 165 1/2		6,000.00
Sold 300: at 172 1/2-closed at 165 1/2		2,100.00
Sold 200: at 167 1/2-closed at 165 1/2		400.00
Bought 2000: at 165 1/2-closed at 251 3/4		172,500.00
Bought 1000: at 170 1/2-closed at 251 3/4		81,500.00
Bought 500: at 175 1/2-closed at 251 3/4		38,125.00
Bought 300: at 180 1/2-closed at 251 3/4		21,375.00
Bought 200: at 185 1/2-closed at 251 3/4		13,250.00
Bought 100: at 190 1/2-closed at 251 3/4		6,150.00
Bought 2000: at 195 1/2-closed at 251 3/4		113,500.00
Bought 1000: at 200 1/2-closed at 251 3/4		51,250.00
Bought 1000: at 205 1/2-closed at 251 3/4		46,250.00
Bought 500: at 210 1/2-closed at 251 3/4		20,625.00
Bought 300: at 215 1/2-closed at 251 3/4		10,875.00
Bought 200: at 220 1/2-closed at 251 3/4		6,250.00

		DEBIT	CREDIT
Bought 100: at 225 1/2-closed at 251 3/4			2,625.00
	Balance	33,425.00	2,833,577.50
Less debits..................................			33,425.00
Less commissions and taxes......................			24,700.00
	Net balance............		$2,775,452.50

Now that we have a total capital of $2,775,452.50, we can be ultra conservative and increase trading unit to 5000 shares. We sell 5000 short at 251 3/4. September 5th, low 245 3/4. We make stop 248 3/4. Stop was caught, and we buy 5000 at 248 3/4. August 7th, high 252 1/2. We make stop 249 1/2. Stop was caught and we sell short 5000 at 249 1/2. Later we sell 3000 at 244 1/2 and 2000 at 239 1/2. September 10th, low 238. September 11th, high 243 1/4. We make stop on all trades 244 1/4. September 13th and 15th, low 230 1/2. We reduce stop to 233 1/2. Stop caught. We buy 5000 at 233 1/2, with stop 229 1/2 and then buy 3000 at 238 1/2 and 2000 at 243 1/2. September 19th, high 247 1/2. We raise all stops to 244 1/2. Stops caught. We go short 5000 at 244 1/2 and 3000 at 239 1/2. September 21st, low 232. We make stops at 235. Stops caught.

We buy 5000 at 235 and 3000 at 240. September 24th, high 241 3/4. We make stop at 238 3/4. Stops caught. We go short 5000 at 238 3/4 and later sell 3000 at 233 3/4, 2000 at 228 3/4. Then 1000 at 223 3/4, 500 at 218 3/4, 300 at 213 3/4, and 200 at 208 3/4. October 4th, low 206 1/2. We figure from the low of 149 3/4 in December, 1928 to the high of 261 3/4 and get 1/2 point at 205 3/4, but we are in a panic, so we follow down with 3 points above the low or at 209 1/2. Stop is caught, and we buy 5000 at 209 1/2 and later buy 3000 at 214 1/2, 2000 at 219 1/2, 1000 at 22 and 500 at 229 1/2. October 10th, high 234, same high as September 26th. We figure from 261 3/4 high to 206 1/2 low and get 234 1/8, the 1/2 point. We sell out at 233 and go short 5000 with stop at 235 1/8. Then sell 3000 at 230 1/8, 2000 at 225 1/8, 1000 at 220 1/8, 500 at 215 1/8, and 300 at 210 1/8. December 21st, low 205, just under the 1/2 point. Also note July 22nd, 24th, and 29th lows, 204 1/2, showing a strong resistance point, where we should cover shorts, but we reduce stops to 208. Stop caught. We buy 5000 at 208 and later buy 3000 at 213 and 2000 at 218. October 22nd, high 218 1/2. We raise all stops to 215 1/2. Stops caught.

We go short 5000 at 215 1/2. Later sell 3000 at 210 1/2 and 2000 at 204, when 1/2 point and bottoms are broken, and sell 1000 at 199, and 500 at 194. October 24th, low 193 1/2. As this is a panic day, we pull stops down 5 points from the low. This covers shorts at 198 1/2, and we buy 5000 at 198 1/2. October 25th, high 207. We know the 1/2 point is 205 3/4, so we sell out at 205 and go short 5000 at 208. Later we sell 3000 at 200, 2000 at 195, 1000 at 190, 500 at 185, 200 at 175, and 100 at 170.

October 29th, the great panic, Steel declines to 166 1/2. We must cover or follow down with stop 5 points from the low, so stop at 171 1/2 is caught, and we buy 5000 at 171 1/2, 3000 at 176 1/2, and 2000 at 181 1/2. October 31st, high 193 1/2. We raise stop to 188 1/2. Stop caught. We go short 5000 at 188 1/2. Then sell 3000 at 183 1/2, 2000 at 178 1/2, 1000 at 173 1/2, and 500 at 168 1/2. November 7th, low 161 1/2. We reduce stop to 166 1/2. Stop caught. We buy 5000 at 166 1/4 and we buy 3000 at 171 1/2. November 8th, high 175 1/2. We make all stops 170 1/2. Stops caught. We go short 5000 at 170 1/2. Then sell 3000 at 165 1/2, 2000 at 160 1/2, and 1000 at 155 1/2.

Here we figure from low of 38, February 1, 1915, to high of 261 3/4, and find 1/2 point at 149 7/8. We also know the move started from 149 3/4 on December 17, 1928. Therefore, 150 is the strongest support level. On November 13th U.S. Steel sells at 150, but we do not wait for the last 1/8. We cover all shorts at 151 and buy 5000 with stop at 148 3/4. Later we buy 3000 at 156 and 2000 at 161. November 15th, high 167 1/2. We make stop 164 1/2. Stop is caught, and we go short 5000 at 164 1/2. December 18th, low 159 5/8. Then buy 3000 at 167 5/8. November 21st, high 171 7/8. We make stop 168 7/8. Stop is caught. We go short 5000 at 168 7/8. Then sell 3000 at 163 7/8. December 2nd, low 159 1/4, only 3/8 under low of November 18th. We make stop 162 1/4. Stop caught. We buy 5000 at 162 1/4 and later buy 3000 at 167 1/4. December 5th, low 164 1/2. We make all stops 163 1/2. Later we buy 2000 at 172 1/4, 1000 at 177 1/4, 500 at 182 1/4 and 300 at 187 1/4. December 9th, high 189. We make stop 186. Stop caught. We go short 5000 at 186. Then sell 3000 at 181, 2000 at 176, 1000 at 171, and 500 at 166. December 13th, low 164 1/4, same low as December 5th. We make stop 167 1/4. Stops caught. We buy 5000 at 167 1/4. Then we buy 3000 at 172 1/4. December 14th, high 174 3/4. We make stop 171 3/4. Stops caught.

We sell 5000 at 171 3/4. Later sell 3000 at 166 3/4. December 17th low 166 1/4. We make stop 169 1/4. Stops caught. We buy 5000 at 169 1/4. December 18th, high 173 1/2. We make stop 170 1/2. Stop caught. We sell short 5000 at 170 1/2. Later sell 3000 at 165 1/2. Sell 2000 at 160 1/2. December 23rd, low 156 3/4. We make stop 159 3/4. Stop caught. We buy 5000 at 159 3/4. Later we buy 3000 at 163 3/4. December 29th, low 163 5/8. We make all stops 162 5/8. Later we buy 2000 at 169 3/4.

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January 2nd, high 173 5/8. Low same day 166. We make all stops at 165. The price of 166 1/8 is the 1/2 point from 70 1/2, low of June 23rd, 1931, and the extreme high 261 3/4. Therefore, a strong support and buying level. January 13th, low 168 5/8.

We make all stops 167 5/8, because since January 2nd the Overnight Chart has made lower tops. January 18th, low 167 1/4. Stops are caught at 167 5/8, and we go short 5000 at 167 5/8, with stop at 170 5/8. Stop caught, and we buy 5000 at 170 5/8. We buy 3000 at 175 5/8, 2000 at 180 5/8 and 1000 at 185 5/8. February 14th, high 189, same as December 9th high. February 17th, low 184 1/2. We make all stops 183 1/2. February 18th, high 189 1/2. We raise stop to 186 1/2. Stops caught. We go short 5000 at 186 1/2 with stop at 190. Later we sell 3000 at 181 1/2. February 25th, low 177. We make all stops 180. Stops caught. We buy 5000 at 180. March 1st and 7th, high 184. We make stop at 181. Stop caught.

The following statement covers trades from September, 1929 to March, 1930:

	DEBIT	CREDIT
September, 1929................................$2,775,452.50		
Sold 5000: at 251 3/4-closed at 248 3/4		15,000
Bought 5000: at 248 3/4-closed at 249 1/2		3,750
Sold 5000: at 249 1/2-closed at 233 1/2		80,000
Sold 3000: at 244 1/2-closed at 233 1/2		33,000
Sold 2000: at 239 1/2-closed at 233 1/2		12,000
Bought 5000: at 233 1/2-closed at 244 1/2		55,000
Bought 3000: at 238 1/2-closed at 244 1/2		18,000
Bought 2000: at 243 1/2-closed at 244 1/2		2,000
Sold 5000: at 244 1/2-closed at 235		47,500
Sold 3000: at 239 1/2-closed at 235		13,500
Bought 5000: at 235 -closed at 238 3/4		18,750
Bought 3000: at 240 -closed at 238 3/4	1,250	
Sold 5000: at 238 3/4-closed at 209 1/2		146,250
Sold 3000: at 233 3/4-closed at 209 1/2		72,750
Sold 2000: at 228 3/4-closed at 209 1/2		38,500
Sold 1000: at 223 3/4-closed at 209 1/2		14,250
Sold 500: at 218 3/4-closed at 209 1/2		4,625
Sold 300: at 213 3/4-closed at 209 1/2		1,275
Sold 200: at 208 3/4-closed at 209 1/2	150	
Bought 5000: at 209 1/2-closed at 233		117,500
Bought 3000: at 214 1/2-closed at 233		55,500
Bought 2000: at 219 1/2-closed at 233		27,000
Bought 1000: at 224 1/2-closed at 233		8,500
Bought 500: at 229 1/2-closed at 233		1,750
Sold 5000: at 233 -closed at 208		125,000
Sold 3000: at 230 1/8-closed at 208		66,375
Sold 2000: at 225 1/8-closed at 208		34,250
Sold 1000: at 220 1/8-closed at 208		12,125
Sold 500: at 215 1/8-closed at 208		3,562.50
Sold 300: at 210 1/8-closed at 208		637.50
Bought 5000: at 208 -closed at 215 1/2		37,500
Bought 3000: at 213 -closed at 215 1/2		7,500
Bought 2000: at 218 -closed at 215 1/2	5,000	

						DEBIT	CREDIT
Sold	5000:	at 215 1/2	-closed	at 198 1/2			85,000
Sold	3000:	at 210 1/2	-closed	at 198 1/2			36,000
Sold	2000:	at 204	-closed	at 198 1/2			11,000
Sold	1000:	at 200	-closed	at 198 1/2			500
Sold	500:	at 194	-closed	at 198 1/2		2,250	
Bought	5000:	at 198 1/2	-closed	at 205			32,500
Sold	5000:	at 205	-closed	at 171 1/2			167,500
Sold	3000:	at 200	-closed	at 171 1/2			85,500
Sold	2000:	at 195	-closed	at 171 1/2			47,000
Sold	1000:	at 190	-closed	at 171 1/2			18,500
Sold	500:	at 185	-closed	at 171 1/2			6,750
Sold	300:	at 180	-closed	at 171 1/2			2,550
Sold	200:	at 175	-closed	at 171 1/2			700
Sold	100:	at 170	-closed	at 171 1/2		150	
Bought	5000:	at 171 1/2	-closed	at 188 1/2			85,000
Bought	3000:	at 176 1/2	-closed	at 188 1/2			36,000
Bought	2000:	at 181 1/2	-closed	at 188 1/2			14,000
Sold	5000:	at 188 1/2	-closed	at 166 1/2			110,000
Sold	3000:	at 183 1/2	-closed	at 166 1/2			51,000
Sold	2000:	at 178 1/2	-closed	at 166 1/2			24,000
Sold	1000:	at 173 1/2	-closed	at 166 1/2			7,000
Sold	500:	at 168 1/2	-closed	at 166 1/2			1,000
Bought	5000:	at 166 1/2	-closed	at 170 1/2			20,000
Bought	3000:	at 171 1/2	-closed	at 170 1/2		3,000	
Sold	5000:	at 170 1/2	-closed	at 151			97,500
Sold	3000:	at 165 1/2	-closed	at 151			43,500
Sold	2000:	at 160 1/2	-closed	at 151			19,000
Sold	1000:	at 155 1/2	-closed	at 151			4,500
Bought	5000:	at 151	-closed	at 164 1/2			67,500
Bought	3000:	at 156	-closed	at 164 1/2			25,500
Bought	2000:	at 161	-closed	at 164 1/2			7,000
Sold	5000:	at 164 1/2	-closed	at 162 5/8			9,375
Bought	5000:	at 163 5/8	-closed	at 168 7/8			31,250
Bought	3000:	at 167 5/8	-closed	at 168 7/8			3,750
Sold	5000:	at 168 7/8	-closed	at 162 1/4			33,125
Sold	3000:	at 163 7/8	-closed	at 162 1/4			4,875
Bought	5000:	at 162 1/4	-closed	at 186			118,750
Bought	3000:	at 167 1/4	-closed	at 186			56,250
Bought	2000:	at 172 1/4	-closed	at 186			27,500
Bought	1000:	at 177 1/4	-closed	at 186			8,750
Bought	500:	at 182 1/4	-closed	at 186			1,875
Bought	300:	at 187 1/4	-closed	at 186		375	
Sold	5000:	at 186	-closed	at 167 1/4			93,750
Sold	3000:	at 181	-closed	at 167 1/4			41,250
Sold	2000:	at 176	-closed	at 167 1/2			17,500
Sold	1000:	at 171	-closed	at 167 1/2			3,750
Sold	500:	at 166	-closed	at 167 1/2		625	
Bought	5000:	at 167 1/4	-closed	at 171 3/4			22,500
Bought	3000:	at 172 1/4	-closed	at 171 3/4		1,500	

	DEBIT	CREDIT
Sold 5000: at 171 3/4-closed at 169 1/4		12,500
Sold 3000: at 166 3/4-closed at 169 1/4	7,500	
Bought 5000: at 169 1/4-closed at 170 1/2		6,250
Sold 5000: at 170 1/2-closed at 159 3/4		52,500
Sold 3000: at 165 1/2-closed at 158 3/4		17,250
Sold 2000: at 160 1/2-closed at 159 3/4		1,500
Bought 5000: at 159 3/4-closed at 167 5/8		39,375
Bought 3000: at 164 3/4-closed at 167 5/8		8,625
Bought 2000: at 169 3/4-closed at 167 5/8	4,250	
Sold 5000: at 167 5/8-closed at 170 5/8	15,000	
Bought 5000: at 170 5/8-closed at 186 1/2		79,375
Bought 3000: at 175 5/8-closed at 186 1/2		32,625
Bought 2000: at 180 5/8-closed at 186 1/2		11,750
Bought 1000: at 185 5/8-closed at 186 1/2		875
Sold 5000: at 186 1/2-closed at 180		32,500
Sold 3000: at 181 1/2-closed at 180		4,500
Bought 5000: at 180 -closed at 181		5,000
Balance	$41,050	$5,733,677
Less commissions and taxes.................	71,175	112,225
Net Profit..............		$5,621,452

We go short 5000 at 181.

We go short 5000 at 181. March 13th, low 177 3/4. March 11th and 14th, high 182 1/2. We make stop 183 1/2. Stop caught. We buy 5000 at 183 1/2. Later buy 3000 at 188 1/2 and 2000 at 193 1/2. April 1st, 7th, 10th, and 16th, highs 198 3/4 to 197, but extreme high 198 3/4. The last low on April 3rd was 192 3/4. We make stops at 191 3/4. Stops caught. We go short 5000 at 191 3/4. Stops caught. We go short 5000 at 191 3/4. Later we sell 3000 at 186 3/4, 2000 at 181 3/4, 1000 at 176 3/4 and 500 at 171 3/4.

May 5th, low 166 1/4. We cover shorts and buy 5000 at 167, because 166 1/8 is the 1/2 point from 1921 low to 1929 high and because low on January 2nd, 1930 was 166. We protect purchases with stop at 165. Later we buy 3000 at 172. May 6th, high 175. We figure 174 3/8 the 1/8 point from 150 to 198 3/4. Therefore, we sell out longs at 174 and go short 5000 at 174 with stop at 176. Then we sell 3000 at 169. May 8th, low 165 3/4. We cover shorts at 166 1/2 and buy 5000 at 166 1/2, with stop at 165. Later we buy 3000 at 171 1/2. May 14th, high 175 3/8. We again sell out longs at 174 and go short 5000 at 174 with stop at 176. Later we sell 3000 at 169. May 20th, low 166 1/4. We again cover shorts and buy 5000 at 166 1/2, with stop at 165. Later buy 3000 at 171 1/2. May 28th, high 175. We sell out longs at 174 and sell 5000 short at 174 with stop at 176. Later we sell 3000 at 169.

June 7th, U.S. Steel sells at 166. We cover shorts at 166 1/2 and buy 5000 at 166 1/2 with stop at 165. Stop was caught same day and we go short 5000 at 165. Steel declines to 164 on June 7th. We can now make stop 167 or wait until the Overnight makes a turn, then place a stop 1 point above the top from which the Overnight Chart turns down again or follow down with a stop loss order 3 points above the low of each day.

The following statement covers trades from March, 1930 to June 7th, 1930, inclusive:

		DEBIT	CREDIT
	Balance forward		$5,621,452
Sold 5000: at 181	-closed at 183 1/2	12,000	
Bought 5000: at 183 1/2	-closed at 191 3/4		41,250
Bought 3000: at 188 1/2	-closed at 191 3/4		9,750
Bought 2000: at 193 1/2	-closed at 191 3/4	3,500	
Sold 5000: at 191 3/4	-closed at 167		123,750
Sold 3000: at 186 3/4	-closed at 167		59,250
Sold 2000: at 181 3/4	-closed at 167		29,500
Sold 1000: at 176 3/4	-closed at 167		9,750
Sold 500: at 171 3/4	-closed at 167		2,375
Bought 5000: at 167	-closed at 174		35,000
Bought 3000: at 172	-closed at 174		6,000
Sold 5000: at 174	-closed at 166 1/2		37,500
Sold 3000: at 169	-closed at 166 1/2		7,500
Bought 5000: at 166 1/2	-closed at 174		37,500
Bought 3000: at 171 1/2	-closed at 174		7,500
Sold 5000: at 174	-closed at 166 1/2		37,500
Sold 3000: at 169	-closed at 166 1/2		7,500
Bought 5000: at 166 1/2	-closed at 174		37,500
Bought 3000: at 171 1/2	-closed at 174		7,500
Sold 5000: at 174	-closed at 166 1/2		37,500
Sold 3000: at 174	-closed at 166 1/2		7,500
Bought 5000: at 166 1/2	-closed at 164	7,500	
	Total..........	$23,500	$6,163,077
Less commissions and taxes	....	$19,875	$ 43,375
	Net credit..............		$6,110,702

Error March 10, 1927 to June 7, 1930
509,600 shares at $25 per 100 shares
should be $50 per 100 round turn...............$ 127,403
Tax at $4 per 100 shares not figured
on 869,700 shares.....................$34,788 $ 162,191
Total net profits........$5,957,511

June 7th, 1930

5000 shares short at 165

June 11, low 160 1/2; June 13, high 166. We make stop on shorts at 167. June 16 we sell 3000 at 161. June 18, low 155. We make stop on all trades at 158. Stop caught. We buy 5000 at

158. June 20, high 162 1/4. We make stop at 159 1/4. Stop caught. We go short 5000 at 159 1/4. June 25, low 151 5/8. We reduce stop to 154 5/8. Stop caught. We buy 5000 at 154 5/8. We could have bought at 152 with stop at 149 because 150 is 1/2 point from 1914 to 1929.

June 27, low 153 1/2. We make stop 153. June 30 Steel crossed 157 1/2, the tops of June 24 and 26 and for the first time since June 28 makes a higher top on the Overnight Chart. For this reason we buy 3000 more shares at 157 1/2 and makes stops on all trades at 154.

On June 30, 1930 the account stands:

	DEBIT	CREDIT
Sold 3000: at 165 -closed at 158		35,000
Sold 3000: at 161 -closed at 158		9,000
Bought 5000: at 158 -closed at 159 1/4		6,250
Sold 5000: at 159 1/4-closed at 154 5/8		23,125
Balance..................$		73,375
Less commissions and taxes.........................		9,720
Net profit...............$		65,655
June 7th capital.........$5,957,511		
Operating capital........$6,021,166		

With 5000 bought at 154 5/8 and stop on all trades at 154 and 3000 bought at 157 1/2.

July 1st, high 161 3/8. We raise stop to 158 3/8 because last high on June 20 was 167 1/4 and failing to cross this level indicated lower. The stop was caught and we went short 5000 at 158 3/4.

July 8th, low 153 1/4. Note low on June 27th was 153 1/2, from which the Overnight turned up for the first time since May 28, when the stock sold at 175. We cover shorts and buy 5000 at 153 1/2 with stop at 152 1/2 because this was a double bottom same as June 27th.

July 9, high 158 1/4; July 10th, low 155 3/4. We raised stop to 154 3/4.

On July 10, when Steel rallies to 158 1/2, we buy 3000 more at 158 1/2 and make stop on all trades 155 1/2.

July 14, high 163 3/4. We raise stops to 160 3/4 or 3 points from the high. We can either follow up with stop 1 point under each day's lowest or wait until the Overnight Chart makes a turn, then place stop 1 point under the Overnight bottom.

July 19, high 168 3/4. We sell out longs and go short 5000 at 168, because 169 is 3/8 point from 198 3/4 to 151 5/8. We makes top 170. July 21, low 162 5/8. In view of the fact that the Overnight Chart still shows up, we note last low at 164 1/4 on July 16. We calculate the 1/2 point from July 10th bottom, 155 3/4, to high at 168 3/4 and get 162 1/4 as the 1/2 point, so we cover shorts and buy 5000 at 163 with stop at 161.

July 23, high 168 1/2. We sell out longs at 168 and go short. July 25, low 164 1/4. We cover shorts and buy with stop at 162 or one point under the low of July 21. July 28, high 170. We sell out longs and go short. July 31, low 163. We cover shorts and buy at 163 1/2 with stop at 162, because 163 is Resistance Level.

August 5, high 170 1/4, a double top against July 28. We sell out longs at 170 and go short with stop at 171. We sell more at 165; then sell more at 160 because it has broken bottoms of July 21 and 31.

The last Resistance Level on July 10th was 155 3/4. The stock declined to 155 1/2 on August 13. We cover shorts and buy at 156 with stop at 154 3/4. Then buy more at 161 where the Overnight Chart turned trend up. Steel advanced to 166 3/4 on August 16. August 18th reacted to 162 3/4 and resumed advance. We raised stop to 161 3/4. August 20, high 168 1/2. August 21, low 165 3/4. Make stop 164 3/4. August 27 and September 2nd, high 172 1/4. September 4th, low 167 1/4, still above main 1/2 point. Stock is at 166 1/4. We make stop 165. September 8, high 173 1/2. Note three tops, May 6th, 14th, and 28th at 175. The 1/2 point is 174 3/8. September 8, we sell out longs and go short at 173 with stop at 176. If it had crossed the 3 tops made in May, we would buy for long account.

September 16 declines and breaks low of September 4th and we sell more at 167; then sell more at 164, because it has again broken the main 1/2 point, 166 1/4. September 27, we sell more at 159. September 30th breaks 155, under bottoms of July 10th and August 13th; then rallies and makes two tops on October 1st and 3rd at 160 1/2. We make stop 161 1/2. Then sell more at 155; then at 149, sell more, because it has broken the low of November 13, 1929, the big 1/2 point.

October 10 and 14, low 144 1/2. We cover all shorts and buy with stop at 142. October 11 and 15, highs 151 1/2 and 152 1/2. We sell out and go short on 2nd top. October 18 we cover shorts and buy 145 with stop at 143. Then buy more at 150. October 28, high 154, and over last 2 tops. We make stop at 151. Stop was caught and we go short. Later we sell more at 146. Then when it breaks 4 bottoms, sell more at 143.

November 8th, 10th and 12th made bottom. We cover shorts on stop at 143 and buy. Then we buy more at 147. The next point to watch is 150, the 1/2 point, where 4 tops were made November 15th, 20th, 21st and 25th. We sell out there and go short with stop at 151. We sell more at 145; then sell more at 140. Cover all shorts and buy for long account at 135, because this is the 1/2 point between 8 3/8 and 261 3/4, being half of the life fluctuation and the strongest point since 150.

It made double top December 18 and 20. We sell out longs and go short at 140. On December 29th it declines to 135 3/4. We cover shorts and buy because 135 is the 1/2 point. We buy a second lot at 141 and when it reacts on January 2nd, we raise stop to 137. On January 7th and 9th, it makes double top and we raise stop to 142, where again we sell out and go short. On January 16 and 19 it makes double bottom at 138 1/2. This is also the 1/2 point between 134 3/8 and 145, therefore, we cover shorts and buy at 139 and protect with stop at 137. On January 24 and 27, double tops and lower than January 9th. We sell out longs at 143 and go short again. On February 5th we cover shorts and buy at 138 because it is the same bottom as was made on January 2nd and 19th. We buy more at 143. On February 16 we sell out longs at 148 and go short because it is a double top and under the 1/2 point and also just under the top made on November 15 to 25.

On February 17th it makes a double bottom just above the 1/2 point of the last move. We cover shorts and buy at 145. On February 26th the stock advances to 152 1/4, failing to get 3 points above the 1/2 point. We raise stop to 149. Stop is caught and we sell out longs and go short.

On March 4th the stock declines to 143 1/2, the 1/2 point between 134 3/8 and 152 1/4. We cover shorts at 144 and go along with stop 142. If the stock crosses 152 and especially if it makes 153 it will be in a very strong position, and indicate much higher.

FORECASTING

The following chapter is a course Gann wrote on forecasting.

"Every movement in the market is the result of a natural law and a Cause which exists long before the Effect takes place and can be determined years in advance. The future is but a rep-edition of the past, as the Bible plainly states.

> "The thing that hath been, it is that which shall be; and that which is done is that which shall be done, and there is no now things under the sun." Eccl. 1:9.

Everything moves in cycles as a result of the natural law of action and reaction. By a study of the past, I have discovered what cycles repeat in the future.

MAJOR TIME CYCLES

There must always be a major and a minor, a greater and a lesser, a positive and a negative. In order to be accurate in forecasting the future, you must know the major cycles.

I have experimented and compared past markets in order to locate the major and minor cycles and determine what years in the cycles repeat in the future. After years of research and practical tests, I have discovered that the following cycles are the most reliable to use:

GREAT CYCLE - MASTER TIME PERIOD - 60 YEARS

This is the greatest and most important cycle of all, which repeats every 60 years or at the end of the third 20-year cycle. You will see the importance of this by referring to the war period from 1861 to 1869 and the panic following 1869; also 60 years later- 1921 to 1929- the greatest bull market in history and the greatest panic in history followed. This proves the accuracy and value of this great time period.

50-YEAR CYCLE

A major cycle occurs every 49 to 50 years. A period of "jubilee" years of extreme high or low prices, lasting from 5 to 7 years, occurs at the end of the 50-year cycle. The "7" is a fatal number referred to many times in the Bible. It brings about contraction, depression and panic. Seven times "7" equals 49, which is shown as the fatal evil year, causing extreme fluctuations.

THE 30-YEAR CYCLE

The 30-year cycle is very important because it is one-half of the 60-year cycle or Great Cycle and contains three 10-year cycles. In making up an annual forecast of a stock, you should always make a comparison with the record 30 years back.

20-YEAR CYCLE

One of the most important Time Cycles is the 20-year cycle or 240 months. Most stocks and the averages work closer to this cycle than to any other. Refer to analysis of "20-year Forecasting Chart" given later.

15-YEAR CYCLE

Fifteen years is three-fourths of a 20-year cycle and important because it is 180 months or one-half of a circle.

10-YEAR CYCLE

The next important major cycle is the 10-year cycle, which is one-half of the 20-year cycle and one-sixth of the 60-year cycle. It is also very important because it is 120 months or one-third of a circle. Fluctuations of the same nature occur which produce extreme high or low every 10 years. Stocks come out remarkably close on each even 10-year cycle.

7-YEAR CYCLE

This cycle is 84 months. You should watch 7 years from any important top and bottom. Forty-two months or one-half of this cycle is very important. You will find many culminations around the 42nd month. Twenty-one months or one-forth of this cycle is also important. The fact that some stocks make top or bottom 10 to 11 months from the previous top or bottom is due to the fact that this period is one-eighth of the 7-year cycle.

There is a 84-year Cycle, which is 12 times the 7-year Cycle, that is very important to watch. One-half of this cycle is 42 years- one-forth is 21 years, and one-eight is 10 1/2 years. This is one of the reasons for the period of nearly 11 years between the bottom of August, 1921 and the bottom of July, 1932. A variation of this kind often occurs at the end of a Great Cycle or 60 years. Bottoms and tops often come out on the angle of 135 degrees or around the 135th month or 11 1/4- year period from any important top or bottom.

5-YEAR CYCLE

This cycle is very important because it is one-half of the 10-year cycle and 1/4 of the 20-year cycle. The smallest compete cycle or work-out in a market is 5 years.

MINOR CYCLES

The minor cycles are 3 years and 6 years. The smallest cycle is one year, which often shows a change in the 10th or 11th month.

RULES FOR FUTURE CYCLES

Stocks move in 10-year cycles, which are worked out in 5-year cycles- a 5-year cycle up and a 5-year cycle down. Begin with extreme tops and extreme bottoms to figure all cycles, either major or minor.

Rule 1 - A bull campaign generally runs 5 years- 2 years up, 1 year down, and 2 years up, completing a 5-year cycle. The end of a 5-year campaign comes in the 59th or 60th months. Always watch for the change in the 59th month.

Rule 2 - A bear cycle often runs 5 years down- the first move 2 years down, then 1 year up, and 2 years down, completing the 5-year down-swing.

Rule 3 - Bull or bear campaigns seldom run more than 3 to 3 1/2 years up or down without a move of 3 to 6 months or one year in the opposite direction, except at the end of a Major Cycle, like 1869 and 1929. Many campaigns culminate in the 23rd month, not running out the full 2 years. Watch the weekly and monthly charts to determine whether the culmination will occur in the 23rd, 24th, 27th or 30th month of the move, or in extreme campaigns in the 34th to 35th or 41st to 42nd month.

Rule 4 - Adding 10 years to any top, will give you top of the next 10-year cycle, repeating about the same average fluctuations.

Rule 5 - Adding 10 years to any bottom, will give you the bottom of the next 10-year cycle, repeating the same kind of a year and the same average fluctuations.

Rule 6 - Bear campaigns often run out in 7-year cycles, or 3 years and 4 years from any complete bottom. From any complete bottom of a cycle, first add 3 years to get the next bottom; then add 4 years to that bottom to get the bottom of the 7 year cycle. For example: 1914 bottom - add 3 years, gives 1917, low of panic; then add 4 years to 1917, gives 1921, low of another depression.

Rule 7 - To any final major or minor top, add 3 years to get the next top, which will give the third top; add 4 years to the third top to get the final top of a 10-year cycle. Sometimes a change in trend from any top occurs before the end of the regular time period, therefore you should begin to watch the 27th, 34th, and 42nd months for a reversal.

Rule 8 - Adding 5 years to any top, will give the next bottom of a 5-year cycle. In order to get the top of the next 5-year cycle, add 5 years to any bottom. For example: 1917 was bottom of a big bear campaign; adding 5 years gives 1922, top of a minor bull campaign. Why do I say "top of a minor bull campaign?" Because the major bull campaign was due to end in 1929.
There was a top in 1919; adding 5 years to 1919 gives 1924 as a bottom of a 5-year bear cycle. Refer to Rules 1 and 2, which tell you that a bull or bear campaign seldom runs more that 2 to 3 years in the same direction. The bear campaign from 1919 was 2 years down 1920 and 1921; therefore, we only expect a one-year rally in 1922; then two years down- 1923 and 1924, which completes the 5-year bear cycle. Looking back to 1923 and 1914, you will see that 1923 and 1924 must be bear years to complete the 10-year cycle from the bottoms of 1913 to 1914. Then, note 1917 bottom of a bear year; adding 7 years gives 1924 also as a bottom of a bear cycle. Then, adding 5 years to 1924 gives 1929 a top of a cycle.

FORECASTING MONTHLY MOVES

Monthly moves can be determined by the same rules as yearly:

Add three months to an important bottom, then add 4, making 7, to get minor bottoms and reaction points.

In big upswings a reaction will often not last over two months, the third month being up, the same rule as in yearly cycle- 2 down and the third up.

In extreme markets, a reaction sometimes only lasts 2 or

3 weeks; then the advance is resumed. In this way a market may continue up to 12 months without breaking a monthly bottom.

In a bull market the minor trend may reverse and run down 3 to 4 months, then turn up and follow the main trend again.

In a bear market, the minor trend may run up 3 to 4 months, then reverse and follow the main trend, although, as a general rule, stocks never rally more than 2 months in a bear market; then start to break in the third month and follow the main trend down.

FORECASTING WEEKLY MOVES

The weekly movement gives the next important minor change in trend, which may turn out to be a major change in trend.

In a bull market, a stock will often run down 2 to 3 weeks, and possibly 4, then reverse and follow the main trend again. As a rule, the trend will turn up in the middle of the third week and close higher at the end of the third week, the stock only moving 3 weeks against the main trend. In some cases the change in trend will not occur until the fourth week; then the reversal will come and the stock close higher at the end of the forth week.

Reverse this rule in a bear market.

In rapid markets with big volume, a move will often run 6 to 7 weeks before a minor reversal in trend, and in some cases, like 1929, these fast moves last 13 to 15 weeks or 1/4 of a year. These are culmination moves up or down.

As there are 7 days in a week and seven times seven equals 49 days or 7 weeks, this often marks an important turning point. Therefore you should watch for a top or bottom around the 49th to 53nd day, although at times a change will start on the 42nd to 45th day, because a period of 45 days is 1/8 of a year. Also watch for culmination at the end of 90 to 98 days.

After a market has declined 7 weeks, it may have 2 or 3 short weeks on the side and then turn up, which agrees with the monthly rule for a change in the third month.

Always watch the annual trend and consider whether it is in a bull or bear year. In a bull year, with the monthly chart showing up, there are many times that a stock will react 2 or 3 weeks, then rest 3 or 4 weeks, and then go into new territory and advance 6 to 7 weeks more.

After a stock makes top and reacts 2 to 3 weeks, it may then have a rally of 2 to 3 weeks without getting above the first top, then hold in a trading range for several weeks without crossing the highest top or breaking the lowest week of that range. In cases of this kind, you can buy near the low point or sell near the high point of that range and protect with a stop loss order 1 to 3 points away. However, a better plan would be to wait until the stock shows a definite trend before buying or selling; then buy the stock when it crosses the highest point or sell when it breaks the lowest point of that trading range.

FORECASTING DAILY MOVES

The daily movement gives the first minor change and conforms to the same rules as the weekly and monthly cycles, although it is only a minor part of them.

In fast markets there will be a 2 day move in the opposite direction to the main trend and on the third day the upward or downward course will be resumed in harmony with the main trend.

A daily movement may reverse trend and only run 7 to 10 days; then follow the main trend again.

During a month, natural changes in trends occur around:
6th to 7th, 9th to 10th, 14th to 15th, 19th to 20th, 23rd to 24th, and 29th to 31st. Those minor moves occur in accordance with tops and bottoms of individual stocks.

It is very important to watch for a change in trend 30 days from the last top or bottom. Then watch for changes 60, 90, 120 days from tops or bottoms. Six months or 180 days is very important and sometimes marks changes for greater moves. Also around the 270th and 330th day from important tops or bottoms, you should watch for important minor and often major changes.

January 2nd to 7th and 15th to 21st:

Watch these periods each year and note the high and low prices are crossed or low prices broken, consider the trend up or down.

Many times when stocks make low in the early part of January, this low will not be broken until the following July or August and sometimes not during the entire year. This same rule applies in bear markets or when the main trend is down. High prices made in the early part of January are often high for the entire year and are not crossed until after July or August. For
example: U.S. Steel on January 2, 1930 made a low at 166, which was the half-way point from 1921 to 1929, and again on January 7, 1930 declined to 167 1/4. When this level was broken, Steel indicated lower prices.

July 3rd to 7th and 20th to 27th

The month of July, like January, is a month when most dividends are paid and investors usually buy stocks around the early part of the month. Watch those periods in July for tops or bottoms and a change in trend. Go back over the charts and see how many times changes have taken place in July, 180 days from

January tops or bottoms. For example: July 8, 1932 was low; July 17, 1933, high; and July 26th, 1934 low of the market.

HOW TO DIVIDE THE EARLY TIME PERIOD

Divide the year by 2 to get 6 months, the opposition point or 180 degrees anglo, which equals 26 weeks.

Divide the year by 4 to get the 3 months' period or 90 days or 90 degrees each, which is 1/4 of a year or 13 weeks.

Divide the year by 3 to get the 4 months' period, the 120 degrees angle, which is 1/3 of a year or 17 1/3 weeks.

Divide the year by 8, which gives 1 1/2 months, 45 days and equals the 45 degree angle. This is also 6 1/2 weeks, which shows why the 7th week is always so important.

Divide the year by 16, which gives 22 1/2 days or approximately 3 weeks. This accounts for market movements that only run 3 weeks up or down and then reverse. As a general rule, when any stock closes higher the 4th consecutive week, it will go higher. The 5th week is also very important for a change in trend and for fast moves up or down. The 5th is the day, week, month, or year of Ascension and always marks fast moves up or down, according to the major cycle that is running out.

BULL AND BEAR CALENDAR YEARS

By studying the yearly high and low chart and going back over a long period of time, you will see the years in which bull markets culminate and the years in which bear markets begin and end.

Each decade or 10-year cycle, which is 1/10th of 100 years, marks an important campaign. The digits from 1 to 9 are important. All you have to learn is to count the digits on your fingers in order to ascertain what kind of a year the market is in.

No. 1. A new decade is a year in which a bear market ends and a bull market begins. Look up 1901, 1911, 1921.

No. 2. The second year is a year of a minor bull market, or a rally in a bear market will start at some time. See 1902, 1912, 1922, 1932.

No. 3. The third year starts a bear year, but the rally from the 2nd year may run to March or April before culmination, or a decline from the 2nd year may run down and make bottom in February or March, like 1933. Look up 1903, 1913, 1923.

No. 4. The forth year, is a bear year, but ends the bear cycle and lays the foundation for a bull market. Compare 1904, 1914.

No. 5. The fifth year is the year of Ascension, and a very strong year for a bull market. See 1905, 1915, 1925, 1935.

No. 6. The sixth year is a bull year, in which a bull campaign which started in the forth year ends in the Fall of the year and a fast decline starts. See 1896, 1906, 1916, 1926.

No. 7. Seven is a bear number and the seventh year is a bear year because 84 months or 840 degrees is 7/8 of 90. See 1897, 1907, 1917, but note 1927 was the end of a 60 year cycle, so not much of a decline.

No. 8. The eighth year is a bull year. Prices start advancing in the 7th year and reach the 90th month in the 8th year. This is very strong and a big advance usually takes place. Review 1898, 1908, 1918, 1928.

No. 9. Nine is the highest digit and the ninth year is the strongest of all for the bull markets. Final bull campaigns culminate in this year after extreme advances and prices start to decline. Bear markets usually start in September to November at the end of the 9th year and a sharp decline takes place. See 1869, 1879, 1889, 1899, 1909, 1919, and 1929- the year of the greatest advances, culminating in the fall of the year, followed by a sharp decline.

No. 10. Ten is a bear year. A rally often runs until March and April; then a severe decline runs to November and December, when a new cycle begins and another rally starts. See 1910, 1920, 1930.

In referring to these numbers and these years, we mean the calendar years. To understand this, study 1891 to 1900, 1901 to 1910, 1911 to 1920, 1921 to 1930, and 1931 to 1939.

The 10-year cycle continues to repeat over and over, but the greatest advances and declines occur at the end of the 20-year and 30-year cycles, and again at the end of the 50-year and 60-year cycles, which are stronger than the others.

IMPORTANT POINTS TO REMEMBER IN FORECASTING

TIME is the most important factor of all and not until sufficient time has expired does any big move, up or down, start.

The Time factor will overbalance both Space and Volume. When Time is up, space movement will start and big volume will begin, either up or down. At the end of any big movement- with monthly, weekly or daily- Time must be allowed for accumulation or distribution.

Consider each individual stock and determine its trend from its position according to distance in time from bottom to top. Each stocks works out it's 1, 2, 3, 5, 7, 10, 15, 20, 30, 50, and 60-year cycles from it's own base or bottoms and tops, regardless of the movements of other stocks, even those in the same group. Therefore, judge each stock individually and keep up weekly and monthly charts.

Never decide that the main trend has changed one way or the other without consulting the angles from top to bottom and without considering the position of the market and cycle of each individual stock.

Always consider the annual forecast and whether the big time limit has run out or not before judging a reverse move. Do not fail to consider the indications on Time, both from main tops and bottoms, also Volume of Sales and position on Geometrical Angles.

A daily chart gives the first short change, which may run for 7 to 10 days; the Weekly Chart gives the next important change in trend; and the Monthly the strongest. Remember, weekly moves run 3 to 7 weeks, monthly moves 2 to 3 months or more, according to the yearly cycle, before reversing.

Yearly bottoms and tops: It is important to note whether a stock is making higher or lower bottoms each year. For instance, if a stock has made a higher bottom each year for five years, then makes a lower bottom than the previous year, it is a sign of reversal and may mark a long down cycle. The same rule applies when stocks are making lower tops for a number of years in a bear market.

When extreme advances or declines occur, the first time the market reverses over 1/4 to 1/2 of the distance covered in the previous movement, you consider that the trend has changed, at least temporarily.

It is important to watch space movements. When Time is running out one way or the other, space movement will show a reversal by breaking back over 1/4, 1/3 or 1/2 of the distance of the last move from extreme low to extreme high, which indicates the main trend has changed.

HOW TO MAKE UP ANNUAL FORECASTS

I have stated before that the future is but a repetition of the past; therefore, to make up a forecast of the future, you must refer to the previous cycles.

The previous 10-year cycle and the 20-year cycle have the most effect in the future, but in completing a forecast, it is best to have 30-years past record to check up, as important changes occur at the end of 30-year cycles. In making up my 1935 Forecast on the general market, I checked the years 1905, 1915, and 1925. For the 1929 Forecast, I compared 1919- ten years back, 1909- twenty years back, 1899- thirty years back, and 1869- sixty years back, the Great Cycle.

You should also watch 5, 7, 15, and 50-year periods to see if the market is repeating one of them closely.

MASTER 20-YEAR FORECASTING CHART

1831 - 1935

In order to make up an annual forecast, you must refer to my Master 20-year Forecasting Chart and see how these cycles have worked out and in the past.

As stated before, the 20-year cycle is the most important cycle for forecasting future market movements. It is one-third of the 60-year cycle and when three 20-year cycles run out, important bull and bear campaigns terminate.

In order for you to see and study how these cycles repeat, I have made up a chart of 20-year cycles, beginning with the year 1831. To show all of the cycles from 1831 to date, I have carried through on this chart the monthly high and low on railroad and canal stocks from 1831 to 1855. Beginning with 1856 I have used the W.D. Gann Averages on railroad stocks until the beginning of the Dow-Jones Average in 1896. After that I have used the Dow-Jones Industrial Stock Averages.

After the end of the 20-year cycle in 1860:

The next cycle begins at 1861 and runs to 1880.
The next cycle begins at 1881 and runs to 1900.
The next cycle begins at 1901 and runs to 1920.
The next cycle begins at 1921 and runs to 1940.

By placing the monthly high and low prices for each of those 20-year periods above each other, it is easy to see how the cycles repeat. The year of the cycles are marked from "1" to "20." Study the chart and note what happened in the 8th and 9th year of each cycle- that extreme high prices have always been reached.

INDIVIDUAL STOCKS

I have told you before that you should not depend on the Averages to forecast the trend of individual stocks. These Averages give you the general trend, and while many stocks will follow this general trend, you should figure out each stock individually and let it's position on geometrical angles and time periods determine the different months in the year when the stock is likely to make many tops and bottoms.

Take any individual stock and make up a chart like the Master Forecasting Chart, carrying it across ten years and twenty years, and see how its tops and bottoms come out. I have made up a chart of the 10-year cycles on U.S. Steel and also a chart of the 20-year cycles, and I am always glad to furnish these charts to the students of my Course on Forecasting so that they may study the individual stocks and be convinced that the theory will work on an individual stock even better than it will work on the Averages.

No person can study the Master 20-year Forecasting Chart and the cycles without being convinced that the time cycles do repeat at regular intervals and that it is possible to forecast future market movements. By studying Resistance Levels, Geometrical Angles, and Volume of Sales in connection with the cycles, you can determine when the trend is changing at the end of campaigns.

FAST MOVES AND CULMINATIONS AT IMPORTANT TIME PERIODS

It is important to go over the monthly chart of Industrial or Railroad averages or any individual stock and look up the months when fast advances and fast declines have occurred and figure the number of months from any important top and bottom.

Watch how bottoms and tops come out on the important Geometrical Angles or proportionate parts of the circle of 360 degrees, which are:

11 1/4	101 1/4	191 1/4	281 1/4
22 1/2	112 1/2	202 1/2	292 1/2
33 3/4	*120	213 3/4	*300
*45	123 3/4	*225	303 3/4
56 1/4	*135	236 1/4	*315
*60	146 1/4	*240	326 1/4
67 1/2	157 1/2	247 1/2	337 1/2
78 3/4	168 3/4	258 3/4	348 3/4
*90	*180	*270	*360

(* very important)

These angles measure the time periods. Always watch what happens around 45, 60, 90, 120, 135, 180, 225, 240, 270, 300, 315 and 360 months from any important top or bottom as all of these angles are very strong and important, just the same as the 45 degree angle, and indicate strong culmination points.

REVIEW OF DOW-JONES INDUSTRIAL STOCKS FROM 1896

1896 - Extreme low in August.

1897 - A secondary low was recorded in April, 1897. We find there was a fast advance in the 11th to 13th month from August, 1896 low.

1898 - A fast advance occurred in the 16th and 24th months from the bottoms of 1897 and 1896, and a fast decline in the 17th and 25th months.

1899 - A bull year, fast advance occurred in the 29th to 32nd months from 1896 and in the 21st to 24th month from the 1897 bottom. Fast declines occurred in the 32nd and 40th months from these bottoms.

1900 - Fast advance 42nd to 44th month from 1897 and 50th to 52nd months from 1896 bottom.

1901 - A fast decline on the 49th month from 1897 and 57th month from 1896 low. Top reached in June.

1903 - A bear year. In the 22nd to 28th month from 1901 top, a fast decline-also 72nd to 78th months from 1897 bottom and 80th to 86th months from 1896 bottom. Bottom reached in October and November, 1903.

1904 - Fast advance, 12 to 14 months from 1903 bottom.

1905 - Fast moves up in the 16th to 18th months, fast decline in the 19th month, and a fast advance in the 25th to 27th months from 1903 bottom.

1906 - Top of campaign reached in January. Fast decline in the 30th month from 1903 bottom.

1907 - Fast decline in the 14th month from 1906 top and in the 19th to 22nd months. Extreme low reached in November, 1907, in the 135th month from 1896 bottom, 127 months from 1897 low, and 22 months from 1906 top.

1909 - Top of campaign reached in October, 45 months from 1906 top and 23 months from 1907 bottom, and 158 months from 1896.

1914 - July, a fast decline in the 57th month from 1909 top, 21 months from 1912 top. Extreme low of campaign in December, 107 months from 1906 top, 26 months from 1912 top, 220 months from 1896 low, 84 months or 7 years from 1907 bottom, and 134 months from 1903 bottom.

1915 - This was a war year. March and April-fast advance on the 3rd and 4th month from the 1914 bottom. May-a sharp, severe decline, 90 months from November, 1907 bottom and 225 months from 1896 bottom. Note these fast moves on a 90 degree angle and 225 degree angle, which is equal to a 45 degree angle, or 180 plus 45.

1916 - April- a sharp decline, 16 months from the 1914 bottom, 123 months from 1906 top, and 236 months from 1896 low. September-fast advance, 21 months from 1914 low, and 240 months from 1896 low, the end of the 20-year cycle, indicating an important change in trend. November-top of a fast advance. Dow-Jones Industrial Averages at the highest price in history up to that time. This was 23 months from 1914 bottom and 243 months from 1896 bottom. December-a sharp decline, 24 months from 1914 bottom.

1917 - August to December-a fast decline, 9 to 13 months from November, 1916 top, 32 to 36 months from the 1914 bottom, 117 to 121 months from the 1907 bottom, and 252 to 256 months from 1896 low.

1919 - A fast advance started in February and lasted until July. This was 27 to 32 months from the 1916 top, and 50 to 55 months from 1914 low. February, 1919 was 135 months from the 1907 low and 270 months from 1896 bottom. The 135th and 270th months, being 3/8 and 3/4 of the circle, were very important for change in trend and starting of moves. October and early November-final top, 36 months from 1916 top. November-a panicky decline, 23 months from 1917 low, 59 months from 1914 bottom (end of five year cycle), and 279 months from 1896 bottom.

1920 - November and December-a fast decline, 12 to 13 months from 1919 top, 35 to 36 months from 1917 low, 72 months from 1914 bottom, 157 months from 1907 bottom, and 291 to 292 months from 1896 bottom.

1921 - August-low of bear campaign, 21 months from 1919 top, 80 months from 1912 bottom, 165 months from 1907 bottom, and 300 months from 1896 bottom.

1924 - May-the last low as made, from which a fast advance started one of the greatest bull campaigns in history, ending in 1929. This was 54 months from the 1919 top, 33 months from 1914 low, and 333 months from 1896 low.

1926 - March-a big decline, with some stocks declining 100 points. This was 23 months from may, 1924 low, 29 months from 1923 low, 55 months from 1921 low, 135 months from 1914 low, and 355 months from 1896 low. August-stocks reached the highest price up to that time, the Dow-Jones Industrial Averages selling at 166. This was 27 months from May, 1924 low, 34 months from October, 1923 low, 60 months from 1921 bottom, 225 months from 1907, and 360 months or 30 years from 1896 low. Then a 20 point decline followed to October, which was 2 months into a new 30 year cycle from the bottom of 1896.

1928 - and 1929 were years of some of the fastest moves in history.

1929 - May to September-one of the fastest moves, advancing nearly 100 points on averages. Final high in September. This was: 118 months from 1919 top, 97 months from August, 1921 low, 240 months from 1909 top, 177 months from 1914 low, 42 months from March 1926 low, 262 months from 1907 low, 64 months from May 1924 bottom, 37 months in the second cycle of 30 years from 1896 low, 71 months from October, 1923 low. Note the strong time angles on the Monthly Chart running out in October and November, 1929, which are 32, 40, 45, 67 1\2, 75, 120, 180.

1930 - April-Last top before another big decline. This was 49 months from March, 1926 low, 71 months from 1924 low, and 78 months from 1923 low. May-a sharp decline. This was 270 months from 1907 low and 45 months in the second cycle from 1896 low. Then there were fast declines to 1931.

1931 - September-a decline of 46 points on the Dow-Jones Averages. This was 24 months from the 1929 top, 95 and 96 months from 1923 and 1924 lows, 121 months or the beginning of a new 10 year cycle from the 1921 low, 201 months from 1914 low, and 61 months in the new cycle from 1896.

1932 - July 8th-extreme low of the bear campaign was reached. This was 71 months from in the new cycle from 1896 low, 131 months from 1921 low, 105 and 96 months from 1923 and 1924 lows, 27 months from April, 1930 top, and 34 months from the 1929 top. August and September-a sharp, fast advance in stocks. This was 35 and 36 months from 1929 top, 28 and 29 months from April, 1930 top, 72 and 73 months in the new cycle from 1896 low, and 132 to 133 months from 1921 low.

1933 - April to July-a fast advance. This was 43 to 45 months from the 1929 top. Always watch for culminations around the 45th month and multiples of 45. It was also 36 to 39 months from the 1930 top, 9 to 12 months from 1932 low, and 80 to 83 months in the new cycle from 1896, or running out a 7 year cycle in the new 30 year cycle. October, 1933-low of reaction, 42 months from April, 1930 top, 49 months from 1929 top, and 15 months from 1932 low.

1934 - February-top. This was 46 months from 1930 high, 53 months from 1929 high, 12 months from 1933 low, 19 months from 1932 low, and most important of all, 90 months into the new 30 year cycle from August, 1926. From this top a sharp decline followed. July-this marked the last low before a big bull campaign started. This was 58 months from 1929 top, 51 months from the 1930 top, 24 months from 1932 low, and 95 months or ending of the 8th year in the new cycle from 1896. Going into the 9th year of this cycle, the market indicated a big bull campaign to follow in 1935 as explained before.

Go over individual stocks and work out their cycles in the same way. Look up the months when extreme highs and lows have been made and note the months from each bottom and top when fast advances and fast declines have taken place. By keeping up the time periods from important tops and bottoms, you will know when important time periods are running our and when a change in trend is likely to take place. Also watch the seasonal changes in trend around March to April, September to October and November to December.

All of this will help you to pick the stocks that are going to have the greatest advances and the ones that are going to have the greatest declines. The more you work and study, the more you will learn and the greater profits you will make.

NEW YORK STOCK EXCHANGE PERMANENT CHART

This Master Chart is a square of 20, or 20 up and 20 over, making a total of 400, which can be used to measure days, weeks, months or years, and to determine when tops and bottoms will be made against strong angles as indicated on this permanent chart. This chart works out the 20 year cycles remarkably well because it is the square of 20.

The New York Stock Exchange was incorporated on May 17, 1792. Therefore, we begin at "0" on May 17,1793. 1793 ends on "1" when the Stock Exchange was one year old. 1812 will come out on 20, 1832 on 40, 1852 on 60, 1872 on 80, 1892 on 100, 1912 on 120, and 1932 on 140. Note that 140, or 7 times 20, in 1932 is equal to a 90 degree angle and is at the top of the 7th zone or the 7th space over, which indicated that 1932 was the ending of a bear campaign and great cycle and the starting of a bull market. We would watch for a culmination around May to July, 1932.

You will notice that the numbers which divide the square into equal parts, run across 10, 30, 50, 70, 90, 110, etc., and that the year 1802 comes out on 10, the year 1822 on 30, the year 1842 on 50, the year 1862 on 70. Note that the year 1861, when the Civil War broke out, was on the number 69, which is on a 45 degree angle. Then note that 1882 ended in May on the 90 degree angle and at the 1\2 point, 180 degree angle, running horizontally across.

Again in 1902 it was at 110, the 1/2 point, and in 1903 and 1904 hit the 45 degree angle. Note that the years 1920 and 1921 hit the 45 degree angle on number 129, and 1922-the first year of the bull market-was at 130 at the 1/2 point.

Note that 1929 was on the 137th number, or 137 month, and hit an angle of 45 degree, and that the year 1930 was at the 1/2 point on the 4th square, a strong resistance point, which indicated a sharp, severe decline.

Note 1933 was on 141 or the beginning of the 8th zone and at the center or half way point of the 2nd quarter of 20, indicating activity and fast advances and fast declines.

The years 1934 and 1935, ending in May, were on 142 and 143, and 1935 comes out on the 45 degree angle at the grand center in the 8th zone and at the half way point of the 2nd square, going to 1/2 of the total square, which indicated great activity.

You can also use this chart from October 12, 1492, when Columbus discovered America. 1892 was end of 400 years or square of 20. 1932 was 40 years in the new square of 20.

You can use this square of 20 for time periods on individual stocks and for price resistance levels.

If you will study the weeks, months, as well as the years, and apply them to these important points and angles, you will see how they have determined the important tops and bottoms in the past campaigns."