THE WAVE CHART

The determination of the trend of the whole market is the starting point of all our deductions and all our Commitments. As explained in Section 5M, this trend is built up by the alternating small buying and selling waves which follow each other in endless succession throughout each day's trading. These little waves merge into medium sized waves and the latter, in turn, merge to make up the large swings, that is, the movements of 10 to 20 or more points.

Therefore, it is obvious that the market's behavior on the small waves must afford a very valuable indication of the future intermediate and major trends. (Sect. 4M, Pg. 27.)

One who is a proficient tape reader has an advantage in being able to watch the market all day long because such a person can study the interplay of the forces of supply and demand as reflected in the market's action on every one of these buying and selling waves. That is, he (or she) is able to judge what measure of success is attending the efforts of the floor and professional trader to advance or depress prices (see Sect. 5M, Pg. 1, Par. 3); judging also how individual stocks and groups of stocks respond to these buying and selling impulses. (Sect. 3M, Pg. 3, Pat. 3.)

The professional operators' success depends upon the extent to which they may be able to attract a following on these small waves. Their attitude is wholly impartial. It makes no difference to them whether the market moves up or down. They swim with the tide and if they catch a strong current, they ride along to its crest. You must learn to do the same. If they find the market responds sluggishly to demand, they will promptly sell and try to force prices down in order to bring out sufficient offerings to enable them to cover at a profit. Or, if the market resists pressure, they will follow the line of least resistance and buy, depending upon the sheep-like tendency of untrained boardroom traders and the public to come in after the move has started and force prices sufficiently higher to permit them to unload with a profit.

As a result of this ceaseless struggle between bulls and bears, the market eventually reaches a position in its broader swings where these professional operators will uncover vital weaknesses or strength. When such a critical condition is reached, the crisis is usually revealed by significant developments in a comparatively short series (few days) of small buying and selling waves. Thus, when a period of accumulation is about completed, a study of the small waves of the market will usually disclose the growing scarcity of offerings which precedes the active marking up stage. Or, when a period of distribution is about ended, a study of the small buying and selling waves will usually reveal the imminence of the active marking down phase.

The tape reader is able to detect these critical stages at their very beginning and thereby gains the advantage of (1) greatly increased accuracy of timing of purchases and sales and (2) consequent reduction of risk. Those of us who have neither the time nor the inclination to study the tape five hours daily require some method of attaining the tape reader's proficiency by equally effective but more convenient means. This we can do very easily by the use of the Wave Chart. (Sect. 4M, Pg. 24, Pars. 1 and 2; Sect. 6M, Pg. 1, Par. 1.)

<u>The Wave Chart</u> has the following very important functions:

(1) It enables those who are not in a position to watch the market constantly throughout each stock exchange session to secure a condensed, easily understandable record of significant changes in supply and demand. This record can be studied at leisure, at whatever time is most convenient.

(2) It provides an instrument through which you may enlarge your understanding of the market's behavior at important turning points; develop tape reading ability if you wish; and acquire the skilled operator's intuition whereby he frequently senses the turns without conscious reasoning.

(3) It gives certain vital information by means of which you may attain proficiency in judging turning points in the minor swinger. This is a great aid in determining the technical position (number 1 and number 3 positions — Sect. 19M) of the Composite Averages; and in timing commitments to best advantage.

(4) It supplies essential information about the market's behavior by means of which you can detect and forecast turning points in the intermediate and major swings — frequently warning you of coming changes two, three or four days and sometimes a week before they become apparent in the popular averages, such as the N. Y. Times 50, Herald Tribune 100, Dow-Jones, etc. This is a material aid in determining the number 2 and number 4 positions (Sect. 19M, Pg. 2.) of the Composite Averages; and in strengthening your decisions as to the best time to act when making commitments for the long moves.

(5) In short, it provides the means whereby you can substantially increase the accuracy of your judgment and the timing of your purchases and sales, enhance your understanding of the market's action at important turning points and hence your ability to forecast coming changes of trend before they are already well under way; and it affords an effective means of detecting the critical points in the market's travel from one level to another.

Even if you plan to become an active, day-to-day trader, it is better at first to learn to analyze the market's tape action from a Wave Chart rather than from the tape itself. The chart teaches you how to become a sound judge of the market, for by its use you become familiar with all the elements necessary in successful trading: judging the lifting power as compared with the pressure; the market's responsiveness or lack of responsiveness to the rotation of supply and demand; the speed of the advances and declines as measured by the net price change and the duration of the buying and selling waves; the character of the buying and selling as revealed by proportional changes in activity and volume on advances and declines; and more especially, the changes from strength to weakness, from weakness to strength, and back again.

All of these factors are revealed by the Wave Chart. It is the pulse of the market.

Practice with such a chart. Learn to judge the small daily movements and then you will be able to apply the same reasoning to the 3 to 5 point swings; to the 10, 20 and 50 point swings, and finally to the great swings that run over a period of years. In time you will become proficient in all kinds of markets.

As the waves of the market cannot be studied from the action of any one stock, and as it takes too long to compile and strike an average of a large group, it is best to use the aggregate price of five leading stocks as a basis for study of these buying and selling waves. There is an additional advantage in observing the behavior of these leading issues because the market seldom goes contrary to the trend of the leaders for a great while, though it may sometimes do so temporarily: They are used by large interests to influence the market toward higher or lower levels. In most cases such movements start with these stocks. Practically no important move starts without these leading stocks being immediately affected. (See "Comparing Strength and Weakness," Sect. 8M, Pg. 4, Par. 4.)

The selection of these five leaders depends upon which stocks were the most influential issues over the past several months. U. S. Steel is almost invariably one of these. Other good ones usually include stocks such as Allied Chemical, American Can, American Telephone, Chrysler, duPont, New York Central and Westinghouse Electric. But this group of five should be adjusted from time to time to meet changing market conditions, the object being to select those which are continuously active and which indicate real leadership. Changes in this group can be made as often as desired, without affecting the barometric value of the chart, by changing the scale, at the side of the chart. If a certain group of five leaders totals 390 and a substitution brings a new one which reduces the total price to 375, the whole scale can be shifted 15 points, and the picture of recent fluctuations will then bear its proper relation to those that follow.

How to Make a Wave Chart. Take a sheet of paper ruled in small squares, or an ordinary sheet of cross-section paper ruled 10 squares to the inch. Consider each vertical line a twenty minute interval in the time scale and each horizontal line one point in the price scale, which should be at the right of the chart. (See illustration, Figure 1, Page 6.)

At the opening of any day's session, figure the total price of the first sales of the five leaders, that is, add the prices of all five. Mark this opening price by a dot on the 10 o'clock line. Then watch these leaders until they have a small swing upward or downward. When that swing exhausts itself, put a dot on the chart at the proper time — that is, 10:10, 10:15, or whatever the time may be to the nearest five minutes. As soon as you have done this, add the price of these five leaders — say at the top of that swing, and then draw a diagonal line from your opening figure to the figure at which the first wave ended and at the proper place for that hour and minute on the chart. (The chart and explanation which follow will make this clear.)

In figuring the aggregate price of the five leaders on an up wave, you take the highest price each of them reaches on that wave when you add up their prices, including fractions. In the same way, on a down wave, you take the lowest prices each stock touches on that wave and add them together. You may find that only three or four of these stocks respond to a buying or selling wave, while one of them declines on an up wave or advances on a down wave. In that case, you may carry forward the price this stock recorded on the immediately preceding wave and add it into your new total; or, if it responds to the movements of the others in a little while, you may regard its previous momentary movement against the trend as in the nature of a delayed transaction, whereupon you wait until it establishes a price in line with the prevailing trend. Then add this price in with the others; that is, adjust your total to reflect the true trend.

If the prices of the five leaders total at the opening, say 380, put a dot on the chart at the point where the vertical 10 o'clock line intersects the horizontal price line representing 380, that is, at A on Figure 1. Suppose that the market then swings upward for a period of twenty minutes, hesitates, and begins to react. You now add the highest prices reached by the five leaders on that upswing, and find that your total is, say, 383. Accordingly, you place a dot on the chart where the 10:20 o'clock line crosses the price line at 383 (B) and draw a line diagonally upward from A to B. Next watch how long it takes for the reaction to run its course and note how far down the leaders go. Then add the lowest prices they touch on this down wave. Assume your new total is 381 and that the reaction lasted 15 minutes. You put a dot on your chart at the proper place on your chart (C) and draw a line diagonally downward from B to C. Continue in this manner until the closing of the market when you add the last prices of the day's session, placing a dot on the 3:00 o'clock line (O) on the accompanying chart. This closing price then becomes the starting point from which you carry forward your chart of the buying

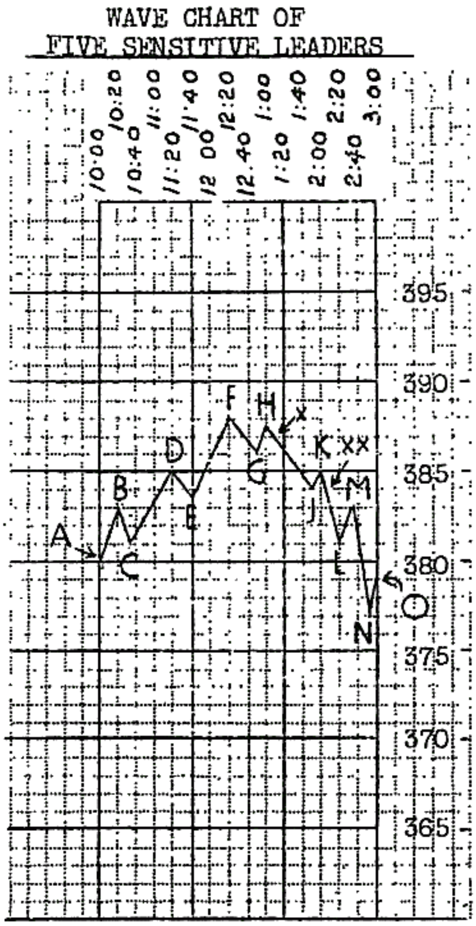


FIGURE 1

and selling waves for the next and succeeding days. Thus you will have a continuous, zig-zag line which portrays the market's price action from one session to another, minute by minute and from hour to hour; and from this chart you are enabled to judge the factors of:

(1) Price movement — number of points advance or decline.

(2) Time elapsed in each movement — up or down.

(3) Comparative lifting power or pressure on each up and down swing.

Applying these factors to the chart on Page 6, Figure 1, the up wave from A to B was 3 points and the time elapsed was 20 minutes. The down wave from B to C is only 15 minutes and the decline 2 points, indicating that the buying power is greater and more sustained than the selling power. Demand is therefore greater than supply.

Suppose the next upswing (C to D) lasts 45 minutes and carries the total price of the five leaders to a higher level than the first advance — say to 385; this indicates an increase in the buying power because the rise was 4 points (C-D) compared with 3 (from the opening at A to B) and the buying wave C-D was sustained 45 minutes compared with 20 minutes (A to B). As the next reaction (D-E), 20 minutes, is only 5 minutes more than the first dip and amounts to only 1 1/2 points compared with the previous reaction of 2 points, you have a confirmation of the strength.

Follow these indications along and you find that the E-F wave lasts 40 minutes and lifts the price 4 1/2 points. Next, the F-G dip lasts 30 minutes — a little longer than the previous one (D-E) — and amounts to 2 points. This reaction shows a slight increase both in time and distance — 30 minutes and 2 points — compared with the preceding reaction of 20 minutes and 1 1/2 points. This warns you to be on the lookout for a change.

Merely to emphasize how the chart should be interpreted, let us now suppose that you are a day-to-day trader. When the rally G-H, only 1 1/2 points, begins to die out (in 10 minutes) you decide to act because this 10 minute bulge lasts only about one-fourth as long as the previous rise of 40 minutes and the price is not lifting as before. This shows that the buying power has practically exhausted itself on the preceding up-swing; the market is now failing to attract followers on the advance. You thus have a clear indication that supply is overcoming demand and the trend is turning downward.

Therefore, as the decline H-J begins on the tape, that is your cue (assuming you are an in-and-out trader) to sell out your long stocks, if any, and go short all of the five leaders (at X) with a stop on each about 2 points above.

We must assume for the sake of a clear illustration that the stocks you trade in are all of the five leaders. You should sell an equal amount of each of the five, but if you like — for simplicity — let us assume that it is <u>one</u> of the five.

The decline (H-J) runs 50 minutes — 20 minutes longer than the previous decline — and amounts to 3 1/2 points compared with 2 points (F-G). The short rally (J-K) lasting only 10 minutes emphasizes the weakness, because it amounts to only 1 point compared with 1 1/2 points (G-H) in the previous rally — the shortest so far, showing that there is practically no buying power left. If you did not go short as above stated, you should do so now, immediately after the market hesitates at K and begins to sag. If you did go short before, you might now sell a second lot at the point marked XX just below the bottom marked J which occurred at 1:50 P.M. at a price of 384.

Reduce your stops on the first lot to a price fractionally above the high made at 12:20 P.M., and stop your second lot at the same figure.

The decline (K-L) runs 20 minutes, but carries the aggregate price of the five leaders down 4 points. A 15 minute rally (L-M) says, when it dies out, that you are safe. Then there is a 20 minute decline of 6 points more (M-N).

The price at the low point of the decline N which ends at 2:55 P.M. is 377. Here you may cover at the market price if your studies indicate that somewhere about this level the market should turn up again. If there is no such indication and you do not cover, your stops should be moved down so that most of your profit will be assured without shutting off the possibility of more profits.

This illustrates how the daily Wave Chart should be read from the standpoint of Price Movement, Time Elapsed and Comparative Lifting Power or Pressure; and how it may be used as a valuable aid in timing your commitments advantageously when you are looking for the logical buying and selling points on which to open or close your positions for the 10 to 20 or more point swings. (Sect. 7M, Pg. 2, Par. 5; Sect. 7M, Pg. 29, Footnote; Sect. 18M, Pg. 10, Last Par.)

The same reasoning (as above applied to the small waves) should be employed in your studies of the larger waves, that is, those which make up the market's minor, intermediate and major trends. (Sect. 5M, Pg. 2, Par. 3 to end of Pg. 3.) And the cumulative impressions you get from your day to day analysis of the Wave Chart will help you to observe how and where the small waves are merging into turning points for the big moves. (Pg. 1, Pars. 3 & 4 and Pg. 2, Par. 1.)

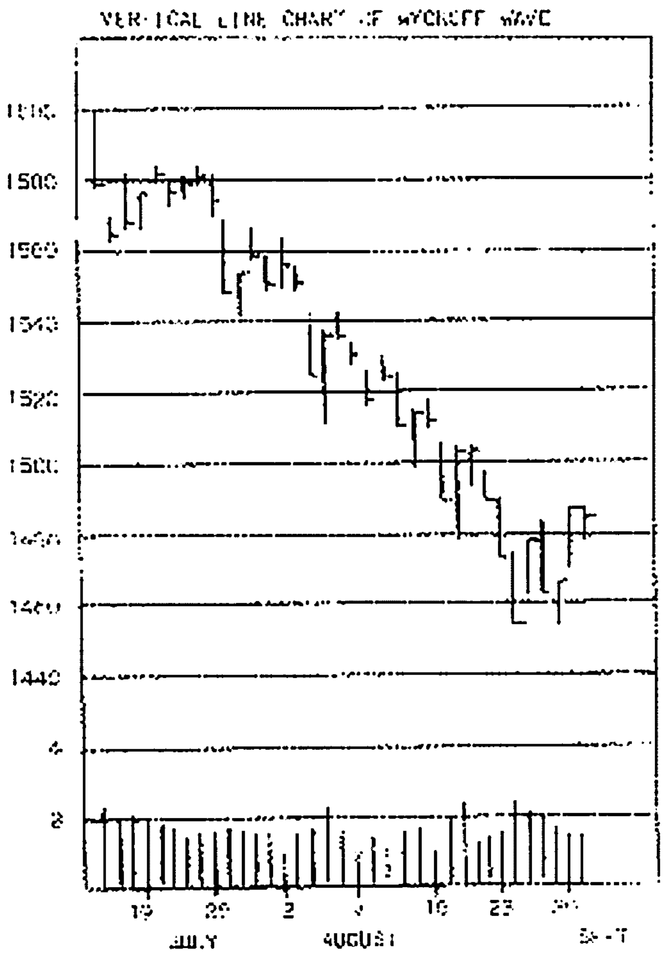
Thus far we have not considered the volume of trading nor the activity because it is better, first, to learn to judge the factors just enumerated — i.e., Price Movement, Time and Comparative Lifting Power or Pressure.

After you have mastered these, you should begin the study of volumes and the intensity of action (activity) in connection therewith (Pgs. 19 to 22). This will give you added understanding and power.

Since the average trader and investor does not have the time nor equipment necessary to secure the data for computing activity and volume, these significant figures are included in the Wave Chart of Tape Readings published by us daily for the convenience of subscribers and issued in the form of daily "Tape Readings" with detailed comment upon each day's market action. (See specimen

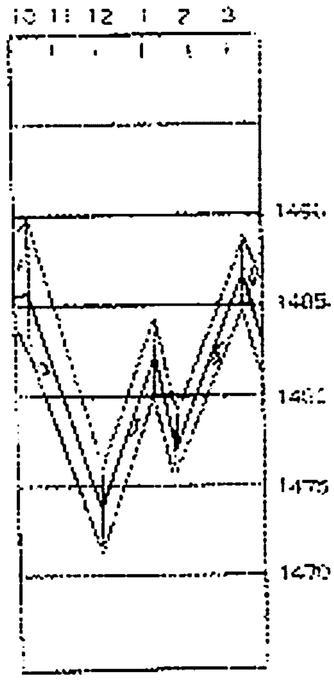
The Wyckoff Wave Chart of Tape Readings

THE PULSE OF THE MARKET



TUESDAY SEPTEMBER 3, 1957

PER	TIME	DUR	PRICE		CHN	VOL	ACT	FC
OPENING			1486					
1.	10:20	20	1486⅛		+⅛	232	4	--
2.	11:55	95	1473¾	L	-12⅜	439	2½	1474
3.	1:10	75	1482¼		+9⅜	251	2	1482
4.	1:30	20	1476⅝		-5⅝	55	1½	1477
5.	3:10	100	1487	H	+10⅜	392	2	1487
6.	3:30	20	1483½		-3½	124	2½	1484



TUESDAY
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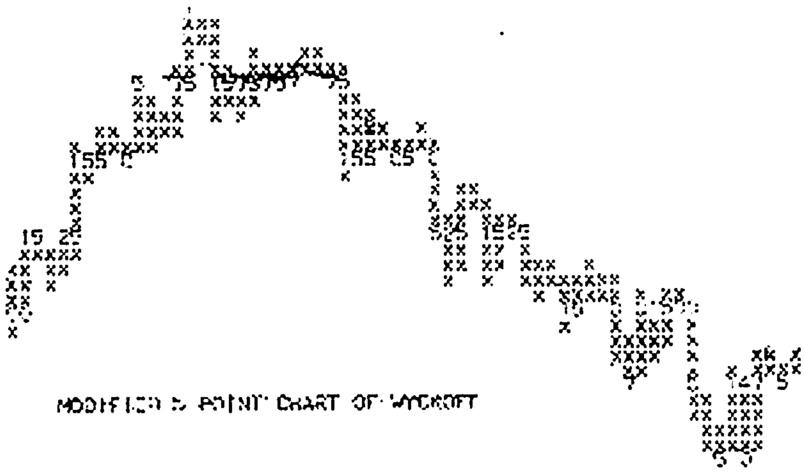

MODIFIED 5 POINT CHART OF WYCKOFF

JULY AUGUST SEPTEMBER

blue sheet supplied in envelope with your Course.)

This service is furnished to each student, gratis, for a period of five months, as a part of his Course of Instruction; and begins six weeks after enrolment, unless you request it sooner. The purpose of withholding it two months is to give you an opportunity to become thoroughly acquainted with all of the principles of this Instruction before you undertake the practical application of the Wave Chart.

Below is a sample of the complete Wave Chart as made up by us. It shows at a single glance all of the vital information herein discussed:-

<u>TAPE READINGS</u>

The Pulse of the Market

A daily analysis of the buying and selling waves on the New York Stock Exchange from the tape of the stock ticker.

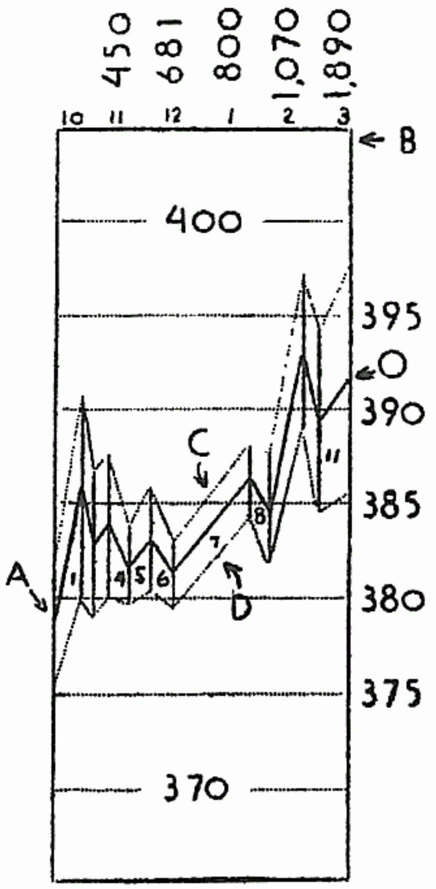

FIGURE 2

(1) PERIOD	(2) TIME	(3) DURATION	(4) PRICE	(5) CHANGE	(6) VOLUME (-000)	(7) ACTIVITY
OPENING			379$\frac{1}{2}$			
1	10:25	25	385$\frac{1}{2}$	+ 6$\frac{7}{8}$	271	5$\frac{1}{2}$
2	10:35	10	382$\frac{3}{4}$	- 2$\frac{3}{4}$	75	4
3	10:50	15	384	+ 1$\frac{1}{4}$	88	4
4	11:15	25	381$\frac{3}{4}$	- 2$\frac{1}{4}$	82	2
5	11:35	20	383$\frac{1}{4}$	+ 1$\frac{1}{2}$	120	3
6	12:00	25	381$\frac{1}{4}$	- 2	68	2
7	1:20	80	386$\frac{3}{8}$	+ 5$\frac{1}{8}$	238	2
8	1:40	20	384$\frac{3}{4}$	- 1$\frac{5}{8}$	76	3
9	2:15	35	393$\frac{3}{3}$	+ 8$\frac{5}{8}$	360	4
10	2:30	15	389$\frac{1}{4}$	- 4$\frac{1}{8}$	186	5
11	3:00		391$\frac{7}{8}$	+ 2$\frac{5}{8}$	325	6

(1) Price Trend. The solid line which zigzags from left to right across the chart (A to O, Figure 2) represents the buying and selling waves throughout each stock exchange session, as reflected in the price fluctuations of five leading active stocks. At this time, these stocks are American Telephone, du Pont, New York Central, U. S. Steel and Westinghouse Electric.

This portion of the chart is constructed in accordance with the method already explained on Pages 3, 4 and 5 of this Section. We use the aggregate or total price of the five leaders instead of the average because this makes a more sensitive indicator. The price scale is shown at the right of the chart. Each horizontal line represents a movement of five points in the total price of the five leaders. The chart is plotted on cross-section paper ruled ten squares to the inch, as in this illustration shown in Figure 1, Page 6, but for the sake of simplicity and convenience in reproducing the graph in printed form all of the small ruled squares which appear on the original copy are not drawn on the chart as we present it. Thus, only every fifth horizontal line, representing a 5 point swing, is shown in Figure 2 and on the blue sheet which we mail to you in the form of the Daily Tape Readings service. (See specimen.)

(2) Time. The time scale is divided into hourly periods as shown by the short vertical bars at the top of the graph (opposite the letter B, Figure 2) and each hour is marked above these short vertical lines.

(3) Volume. Above the time scale at the top of the graph is the share volume as it is reported on the ticker tape from hour to hour. However, as the market may swing up and down several times within any one hour, these figures as reported by the New York Stock Exchange do not reveal the volume of transactions accompanying each buying and selling wave. Therefore, in the table at the right of the Wave Chart graph, we record the approximate total volume of transactions occurring in all stocks on each separate buying and selling wave (see Column 6). These volume figures are reported to the near-

est thousand. Incidentally, they are an exclusive feature of our Tape Readings service and are obtainable nowhere else.

(4) Activity. The market's activity, that is, the intensity of trading, is indicated by the small figures in Column 7 of the table and by the two irregular dotted lines which appear in the chart, running along, one above (C) and the other below (D) the solid line which represents the price path. The market's relative activity, that is, the pace of trading, is reflected in the size of the index numbers recorded ii the table (Column 7) which are proportional to the change of activity. Thus, an index number of 1 or 2 reflects dullness; a unit of 3 to 4, moderately active trading; and 6 to 7, high activity. In extremely active markets, when the tape is late, the activity index may rise to as high as 10 or more.

Changes in activity are shown graphically on the chart by measuring off, vertically, equal distances above and below the turning points of the price line. For example, in Figure 2, we draw a vertical line through the dot which represents the price of 385 1/2 at 10:25 A.M. at the end of Period 1. Since the activity for this period was 5 1/2 (see first line, column 7 in the table), we measure up 5 l/2 small squares or spaces on our cross-section paper from the dot at 385 l/2 and down an equal number so that the vertical line just mentioned extends equally above and below the turning point of the central price line at 385 1/2. Period 2 ends at 10:35 with the price at 382 3/4. Another vertical line is drawn through this turning point on the chart and the activity index for that period, which was 4 units, is measured off by running this vertical line up 4 spaces and down the same number from the price at 382 3/4. The ends of these vertical lines are then connected by the dotted lines to form small parallelograms. In this way the chart graphically portrays the changes in the market's activity on each buying and selling wave by the spread of the dotted lines at the top and bottom of each period. Consequently, when the activity is increasing, the dotted lines move further apart, as in Period 9. When the activity is decreasing, the dotted lines move closer together as in Period 6. Observe that in Period 7 the dotted lines are parallel, meaning that there was no change in the pace of trading in this period compared with the previous one, Period 6. (*)

It will be noted that the vertical bars which serve to measure off the activity index on the chart also mark the time at which each up and down wave ends. Hence the horizontal distance between these lines indicates the duration of each buying and selling wave, corresponding with the figures shown in Column 3 of the table.

The price rallies (up waves) and reactions (down waves) during the session are designated as periods, numbered consecutively on the graph from left to right in the order of their occurrence. Some of these figures are omitted from the chart because there is not always enough space in which to print, them on the

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* The quality of demand oh the more critical buying waves and the quality of supply on the more significant selling waves is an important factor in judging the trend. Thus, if it appears that transactions on an up wave are mostly in 100 share lots, the indication is that the rise is not likely to continue because such small lot trading would represent small fry operations, hence demand of poor quality. But if, on an up wave, transactions are predominantly in 1,000 to 2,000 or 5,000 share lots, the indication would be that demand is coming from important sources and hence is of good quality. The reverse of this reasoning applies in the case of a selling wave, small lots indicating poor, and larger lots good quality offerings.

By casually (not mathematically) comparing the activity with the volume and duration of the buying and selling waves, we are able to judge whether the supply or the demand is of good or poor quality. For example, suppose we have two buying waves each of 10 minutes duration and each showing a volume of 100,000 shares. And suppose that the activity index registers 5 on the first, but only 3 on the second wave. Obviously, demand must be of poorer quality on the first wave than on the second because, while the market is more active on wave number one, since time and volume are the same, this greater activity can be accounted for only by trading in smaller lots as compared with wave number two.

These comparisons should only be made when it appears that the action of the market is becoming critical. To make them for every buying and selling wave will result in confusion and needless expenditure of time and effort.

Incidentally, it should be noted that the activity index has no relationship to the price movement as recorded in the Wave Chart table, and it is only indirectly related to the time and volume figures because it represents the rate at which orders are flowing into the market, not a ratio between time and volume.

stencil from which the graph is made.

<u>The Table</u> at the right of the graph contains a complete summary of each session's significant price, volume and activity change. These figures are the data from which the chart is constructed and are presented in the table in such form that the student may quickly analyze all of the relationships between time, volume, activity and net price change on each buying and selling wave.

<u>Comments</u>. Our detailed comments upon the day's market action are set forth in the text which appears underneath the graph and table (see specimen blue sheet furnished in separate envelope). These comments are intended to give a complete summary of all important technical developments, as they occur, during each day's session. It will be noted that each paragraph is numbered to correspond with the period numbers as they appear in the chart and the table. This is done so you may readily associate our comments with the proper buying and selling waves.

Having acquired an understanding of the construction of the <u>complete</u> Wave Chart, you are now ready to study its practical application to the purposes outlined on Pages 1 to 3 of this Section and Page 27, Section 4M. To secure the best results from your Wave Chart studies, you should make up 1 and 10 point figure charts of the price fluctuations of the five leaders and a 3 or a 5 point chart (see illustrations, pages 32 to 37). The 1, end 3 point charts are of great value in judging the turning points of the intermediate swings of the market, while the 10 point chart gives an excellent perspective of the major trend.

These figure charts may be made very easily and quickly from the figures on the blue sheet as they are recorded beneath the table under the heading "One Point Changes of Wyckoff Tape Readings." (See specimen blue sheet.)

Another good plan is to keep a continuous or running line chart of the

Tape Readings by clipping the graph from these blue sheets as you receive them and pasting the daily charts side by side in a book or on a large sheet, with the price scale in adjustment over a period of several days or weeks, as illustrated on Pages 30 and 31, this Section; or it will be sufficient merely to paste the graphs side by side, folding them in accordion fashion when the record becomes too long. By keeping your daily charts in this way, you are enabled to observe significant changes in the forces of supply and demand as the small buying and selling naves merge into and build up the swings of from 3 to 5 points and then into the larger movements of 10 to 20 or 30 and more points over a series of daily stock market sessions. This continuous, or running record of charts pasted together also affords a valuable means of judging the market's behavior when you are coordinating your study of the volume and activity relationships with your analyses of the indications given by the 1 point and 3 or 5 point figure charts of the Tape Readings.

When you learn to coordinate all of the factors revealed by these records in combination and use them properly, it will greatly strengthen your judgment. You will find that, whatever the market does, it will in nearly every instance tell you what it is going to do — and what the market is going to do is the most desirable thing to know in Wall Street. Or it will leave you in doubt, <u>and then you must do nothing</u>.

Before taking up the interpretation of these records, however, we must consider the significance of volume, activity and support and pressure.

Your continuous line chart of the Tape Readings, pasted side by side, enables you to maintain a complete, running history of the market's behavior from which you can observe how the relationships between volume, price trend and activity are changing. From this you can judge whether the market is growing stronger or weaker. These relationships frequently become very important when the market, as represented by the action of the five leaders, is approaching former points of support and resistance.

Relationship of Activity, Volume and Price Trend. As previously, explained, changes in the market's activity on the alternating small buying and selling waves are indicated by the way the dotted lines come together or spread apart on the chart, a condition which is easy for the eye to detect. These comparisons, of course, may also be made by reference to the figures in the table (Column 7). Increasing or decreasing activity, accompanying a price rally or reaction during any period of the day, is immediately apparent from these comparisons.

Remember, that when the activity is increasing while the price is rising or the activity is decreasing while the price is declining, the indication is usually bullish — except under some conditions when the increase in activity is unusually, large. In these cases (unusually large increases accompanying an up or a down wave) the sudden increase may signal the culmination of a movement. When activity is increasing while the price is declining or the activity is decreasing while the price is rising, the indication is usually bearish.

Likewise, when volume is increasing while the price is rising or decreasing while the price is declining, the inference is usually bullish — unless the increase is unusually large, in which case the sudden increase may indicate the culmination of the particular movement accompanying the abnormal volume. (If you will here review what you learned from the reference to volume in Section 7M, the logic of this will be immediately apparent. See also volume studies, Sect. 14M, Pgs. 6-12.)

Similarly, when volume is increasing on the down waves and decreasing on the up waves, the indications are usually bearish — unless the volume surge is abnormal, in which case the abnormal volume may indicate the approach or the actual culmination of the movement.

Support and Resistance. A very important thing to observe from the chart of the five leaders is <u>where</u> they meet support on the declines. That indicates the level at which the dominating interests in these stocks are wiling to buy them and usually affords a strong indication of the attitude of these interests and of large operators toward the whole, market. (See Pg. 4.) Likewise, observe where the leaders meet resistance to advances. This indicates the level at which shrewd holders are selling, and if it appears that a large quantity of stock is coming into the market on these advances, this is a strong indication that insiders and large operators are taking advantage of a broad, active market to load the public up, with the stocks which they wish distribute. (Sect. 8M, Pg. 5.)

In trading, the value of any stock is the price you can get for it within one minute. Hence the price at which the insiders are willing to take it or sell it combined with the <u>amount</u> they appear willing to buy or sell at that price, is a strong indication of its immediate future.

Support and resistance may be studied either by reference to your continuous line chart or by reference to your one point figure chart of the five leaders; or hotter still by using both together.

The chart studies which follow will illustrate how to interpret the Wave Chart and how to coordinate all of the factors involved in its practical application to your own market operations, either as an investor or as a trader. To simplify your approach to these studies, we begin by enlarging on our study of the Wave Chart for a single session (Pgs. 6 to 9) by adding the factors of Volume Activity and Support and Pressure to the factors of time elapsed, price movement and comparative lifting power or pressure, which were discussed in pages 7 to 9.

In this next illustration, Figure 3, merely for the sake of emphasizing what to look for and to show how experienced operators judge the market assume again that you are a day to day trader, making your deductions from a Wave Chart as a stock market session progresses from its opening to the close.

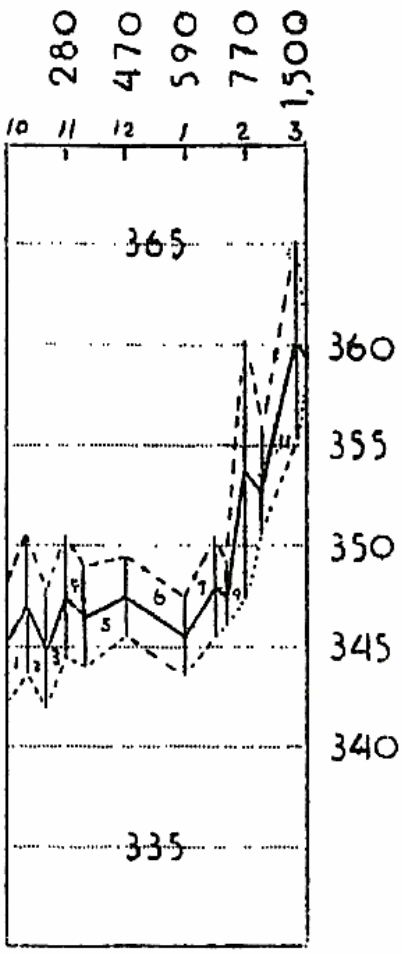


FIGURE 3

PER-IOD	TIME	DURA-TION	PRICE	CHANGE	VOL-UME	ACT-IVITY
Opening.............			345			
1	10:20	20	347	+ 2	142	$3\frac{1}{2}$
2	10:40	20	$344\frac{7}{8}$	− $2\frac{1}{8}$	65	3
3	11:00	20	$347\frac{3}{8}$	+ $2\frac{1}{2}$	73	3
4	11:20	20	$346\frac{1}{2}$	− $0\frac{7}{8}$	55	$2\frac{1}{2}$
5	12:00	40	$347\frac{1}{2}$	+ 1	135	2
6	1:00	60	$345\frac{1}{2}$	− 2	120	2
7	1:30	30	348	+ $2\frac{1}{2}$	72	$2\frac{1}{2}$
8	1:45	15	$347\frac{1}{2}$	− $0\frac{1}{2}$	23	$1\frac{1}{2}$
9	2:00	15	$353\frac{3}{4}$	+ $6\frac{1}{4}$	85	$6\frac{1}{3}$
10	2:15	15	$352\frac{3}{4}$	− 1	53	$2\frac{1}{2}$
11	2:50	35	$360\frac{1}{8}$	+ $7\frac{3}{8}$	597	5
12	3:00	10	$359\frac{3}{4}$	− $0\frac{3}{8}$	80	2

In this illustration, it will be seen that volume and activity are both of very small proportions on the little buying and selling waves from 10 o'clock to 1:00.P.M. The day starts with a small rally which is promptly followed by a small dip. Bulls and bears are evidently well matched during this part of the session since neither faction has been able to move the market far in either direction. Supply and demand are in equilibrium. Your position, therefore, should be neutral while you are waiting for a clear indication.

After the first dip in Period 2, the bulls try to put prices up (Period 3), but they fail to attract a following as shown by the failure of activity to increase on the up wave and their inability to lift the price index much above the 10:20 A.M. high. Demand peters out on this rally to the previous (10:20 A.M.) top. A small dip in the fourth period brings out very little stock, however, and the reaction fades out at a higher support, i.e., above the 10:40 A.M. low. This encourages the bulls to try again (Period 5). Once more they fail to attract a following. Note how the rally dies out in dullness around the two previous tops (activity in period 5 is the smallest so far). So now, the bears endeavor to break the deadlock by offering stocks down (Period 6) until 1 o'clock. This maneuver meets no better success. The time elapsed is longer on this wave than on the previous swings, but activity fails to increase and the volume is light which tells us the supply is of poor quality, only small fry traders are selling (Footnote Pg. 14), so we may expect the price to hold around the former supporting levels of periods 2 and 4. This expectation is confirmed when the price index actually halts above the morning low and the market turns dull there.

We now have a tentatively bullish signal since it appears from our observations thus far that the bears are unable to bring out offerings on reactions. Furthermore, the market has come to a complete standstill which warns us to be ready for a change. That is, at the end of period 6 it is on the hinge. Everything now depends upon the ability of one side or the other to rouse a following, either by breaking down the support or by pushing prices up through the forenoon top. We judge that the stalemate will be broken by an advance because the bears seem to have failed in their weak 1 o'clock drive; the selling on this down wave was of very poor quality, only 120,000 shares in 60 minutes against 135,000 shares in 40 minutes on the preceding up wave. Hence if we are trading for the short swings this is our cue to buy, though we may prefer to wait for more positive indications.

Now it is the bulls' turn to try their strength again. This time (Period 7), demand is a little stronger. Volume is comparatively larger (72,000 shares in 30 minutes compared with 120,000 shares in 60 minutes during the preceding down wave) showing improvement in the quality of the buying — larger lots of stock are changing hands. Prices rise above the previous highs (showing better lifting power) and activity increases a trifle as they advance, indicating the market is now attracting a following on the up side as it struggles to advance.

We may expect the leaders to hesitate and perhaps react (which they do) as the price index comes up to, or toward, the tops of periods 1, 3 and 5 since the market was turned back from these levels on three previous occasions. But if activity falls off on this next selling wave, the bulls are likely to become aggressive.

We do not have long to wait. Prices sag only fractionally in the next fifteen minutes (Period 8) as the market pays its respects to the forenoon resistance levels. Volume is very light and activity dries up almost completely on the dip. This is what we have been looking for. If we failed to buy on the first tentative bullish indications we must do so now on this convincing performance. The extreme dullness (low activity) and small volume accompanying the recession tells us there are few offerings coming into the market; there is no longer any pressure; stocks have become scarce at this level. The supply that was holding previous rallies in check has been exhausted or it has been absorbed on the small earlier reactions. Therefore, we step in with confidence and buy. Other shrewd traders, seeing the lack of pressure and the scarcity of supply, may be expected to buy also, thus helping the bulls along.

A sharp rise in period 9 promptly confirms our judgment. Any question as to the validity of this upward move is settled by the increase in activity as prices rise through the previous tops. The bulls have now attracted sufficient following to drive the bears into a retreat. Volume is expanding in proportion with the activity as the price rises sharply, showing that demand is of good quality, and growing urgent. (Footnote, Pg. 14.)

Shortly before 2 o'clock, the bulls rest momentarily because at this point the price index has risen to a level where the market encountered supply, on the preceding Friday and Saturday (not shown on chart). If the supply around these former highs is still formidable, the market is likely to fall back quickly, forcing the bulls to give up their gains. But it doesn't fall back. Instead, it recedes very stubbornly as evidenced by prompt shrinkage of volume and activity. Also, the small net change in price and brief duration of the reaction confirm the indications that the previously overhanging supply has been absorbed or dislodged. As there obviously is no pressure on the market yet, and few offerings to be taken at this level, we stay long and wait for the bulls to push on again as they try for a higher objective. This they attain just before the close.

In the above and the preceding example, explaining, Figure 1, the Wave Chart principle was considered only from the standpoint of one day's action.

You are now ready to take up the next and most vital function of this chart which is its application to the market's longer swings of 10 to 20 or more points. For this purpose you should use the daily graphs pasted side by side, together with the 1, the 3 or 5, and the 10 point figure charts of the price fluctuations of the five leaders.

Not every day's Wave Chart will give as decisive indications as those we have just discussed. Hence, do not make the mistake of expecting every one of your daily charts to yield positive evidence. There may be some days on which the action seems contradictory or confusing. You must make allowances for that by waiting until you get another clear indication. But at important turning points in the trend you generally will find that the market reaches a critical condition in which its action on certain days will convey very vital information (Pg. 2, Pars, 1 & 2) and it is at these points that the Wave Chart attains its greatest value.

For instance, just as the action on the small waves in periods 1 and 5,

Figure 3, left us uncertain of the immediate trend, whereas the market's behavior in period 6 and 7 became sufficiently critical to warn us of a material! changer so in the case of the larger movements, the market's action for several days may be indecisive but eventually there comes a time when its behavior over one or more full sessions will warn you of an important change in the intermediate trend if you are alert and properly trained.

<u>APPLYING THE WAVE CHART TO THE LARGER MOVES.</u>

If you now will look at the one point figure chart on page 32, just under the letter A, you will observe ,that the five leaders are swinging up and down in a range between 409 and 419. This action took place on the rebound from the low of July 21, following the distributive campaign in the summer of 1933. This trading range, under A, is developing just under the July, 1933 tops. Reference to the running line chart of the five leaders (Pg. 30) shows that the total daily share volume ail the top of the August rise is comparatively heavy, though considerably less than the daily turnover accompanying the rise and subsequent distribution in July (when volumes reached the 6 to 9 million share mark). This of itself indicates that the public's buying power, or the market's power of absorption, now (August, 1933) has been materially weakened as a result of previous speculative excesses and in consequence of the severe July 18th to 21st slump.

This August recovery had brought the market back up into a very formidable resistance area. Our problem at this point, therefore, is to determine whether it promises to go into new high ground or whether this recovery will develop into a campaign of secondary distribution, completing the primary distribution of July.

For the purpose of this study, assume that it is now Tuesday evening, Aug. 29, 1933 and we have our records for the past few weeks before us. Comparing the one point figure chart of the five leaders at A, page 32, with the daily

Wave Charts for August 25 to 28, page 30, it is immediately apparent that the market (as represented by the five sensitive leaders) is attempting to advance under difficulties. Thus, the price movement (as represented by the zig zagging solid line) shows a tendency to flatten out or run sidewise. The action is feverish (Sect. 14M, Pg. 8, Par. 4) as shown by the comparatively high activity. Also, there is a lack of progress on relatively heavy volume.

The figure chart at the same time indicates that the bulls are finding it difficult to hold the market up. At 409 (under the letter A, Pg. 32) the price index broke through the previous support (or the lows) of 412. This action corresponds with period 3, Aug. 28, on the chart page 30. They try to check this selling drive on the part of the bears by bringing up their reserves for a counter attack and succeed in forcing the price up again. But here (around 416-18 on the figure chart) they falter. Apparently, they have exhausted their ammunition for the figure chart shows a leveling off under the previous high point at 419; indicating inability to continue the advance.

Now let us apply the microscope to this portion of the figure chart by referring to our running line graph, page 30. On Aug. 28 there is a shrinkage in volume around the top — 2,120,000 shares compared with 3,500,000 the day before. During the latter half of the session (Periods 5 to 9) activity has failed to increase on the up waves. These are bearish indications confirming the weakening of the bulls' attacking power, since heretofore (Aug. 24 & 25) the Wave Chart shows that activity has consistently increased on the up waves. Likewise, activity previously has either shrunk or failed to expand on the down waves. This says that whereas the bulls previously were able to attract a following on advances and sellers were reluctant to follow prices downward, now the buyers are becoming timid. The Wave Chart thus shows accumulating evidences of a change from weakness to strength.

As the session of Aug. 28 closes, demand is still sufficient to hold the price index in the range 416-18. But next day, sensing the fact that buyers have now become reluctant, the bulls make one more desperate effort to carry on their campaign. On the morning of the 29th, they succeed momentarily in breaking through the bears' line of resistance, forcing the market to a new high. This brings the price up to 421 on the figure chart (under A) . The public and the boardrooms, hailing this break-through as a signal of victory for the bulls, jump in to help create a broad, active market on which they exhaust the remaining buying power. Activity reaches climactic intensity as the shrewder bulls and smart bears unload all these buyers will take (shown by the fact that in period 3, the leaders promptly lose all they gained on the initial bulge with volume and activity still very high). Here we have a good illustration of an upthrust (Sect. 21M, Pg. 3, Par. 3) that has failed and in so doing, marks the culmination of this particular advance.

Having recognized preceding symptoms of a possible turning point, we regard this action in periods 1 to 3 of August 29 as the critical stage at which the intermediate trend has changed form bullish to bearish. Behavior of the Wave Chart through the balance of the session strongly substantiates this conclusion. The outpouring of supply which stopped the bulls' forward rush in period 2 continues unabated thereafter. Volume and activity are undiminished as prices slump between 10:30 and 10:40, indicating that sellers are unloading all they can "at the market." Between 11 and 12 o'clock (period 4) pressure lifts while the sellers rest to size up their position and allow the bulls to venture a counter attack. This takes the form of a normal rally which lays bare the weakness of the counter attackers, since activity immediately contracts on the recovery — the buyers are all loaded up and can't take on any more stock.

This is the Second time a rally has failed to attract good quality demand in this very critical area (the first was in period 4, Aug. 28), so the bears are encouraged to resume the offensive. They clinch their victory by bringing out a fresh deluge of offerings in period 5, on which the price index breaks Monday's support around 409. Just under this level, pressure lifts once more to permit another rally. The weakness of the bulls' position is again confirmed when the rally falls a little short of normal and activity fades out — further evidence of more decline ahead.

On the next downward drive, however, there is a lessening of activity (Period 7). The bears are a little wary now as the price is coming down close to the Aug. 24 low. Furthermore, the decline from the early morning high has been very steep and severe. Under these conditions we may expect another technical rally as floor traders cover shorts put out on the early morning bulge. Our one point chart also indicates that the leaders have reached their immediate objective, since we have a line of supply across the 418 level (see A, Pg. 32) calling for a drop to 406-403.

Examining the results of these four days' tape action (Aug. 24 to 29) in the quiet of our home on Tuesday evening or Wednesday morning, and reasoning as above briefly outlined, we see that the Wave Chart is warning us of an impending change of trend of considerable importance. It is telling us that during these few days, the market has developed accumulating symptoms characteristic of distribution. And since this, distribution is occurring under the earlier July tops, it very probably represents a maneuver on the part of the bull forces to complete the unloading of stocks which they didn't succeed in, dumping a month or more earlier. Hence, after we have had a chance to examine the results of Tuesday's action, we decide to close out our long positions, if we have any, and go short the next day (Aug. 30).

We are not impressed with the character of the rally in period 8, Aug. 29, for while the lifting power seems good from the standpoint of ground covered, this rebound looks more like short covering by traders, or perhaps another desperate rally engineered by the bulls who still have some stocks left to unload before the decline gets fully under, way. Note that activity again fails to expand on this up wave, making the third time there has been inability to attract a good quality of demand on the up side. With so many, indications of progressive weakness, we decide that this final rally indicates the market has been thoroughly saturated with supply. Under such conditions we cannot expect the bull forces to overcome the resistance around 415 (see figure chart). Rather, the hurry up character of this last bulge tells us they are probably taking advantage of a temporarily oversold condition, the help of short covering, and some new buying by floor traders who see a chance to scalp a quick profit on the long side, to wind up their campaign as quickly as possible.

Observe that our 5 point figure chart (Pg. 36) shows a line of seven 418s and ten 415s, indicating a decline to either 400 or possibly 391. This would mean an important slump in the other averages and probably a serious decline ahead in those individual stocks and groups of stocks which our other records show to be in weak positions.

Following the action along from here, on the one point figure chart, observe that some support appears around the 401-400 level, about where our 3 point chart said it should. But offerings come in again on the indicated 12 point rally to 413 and a new line of supply forms across the 410 level on the 1 and 3 point charts, stretching out to 20 points on the former and from 24 to 33 on the latter. The price index more than makes good the most conservative objective by dropping to 390 where the charts show indications of sufficient new demand to support a recovery to 408 or 416. Then (at C, Pg. 32) there is more distribution around the 415-419 level, followed by a collapse to 399 (under D), and a hypodermically stimulated rise to a secondary top 417 (D) which sets the stage for the intermediate downward trend to 321 (Pg. 34, under H).

By studying the continuous line chart (Pg. 31) in conjunction with the 1 and 3 point figure charts at K, Pg. 35; and by applying the principles already outlined, you will see how the Wave Chart again revealed the vital details of the market's action, as its behavior became critical, in advance of an important reversal of the intermediate trend, this, time as a base was formed for a substantial advance. It is suggested you make this detailed study for yourself, consulting our Coaching Staff if you encounter any difficulties.

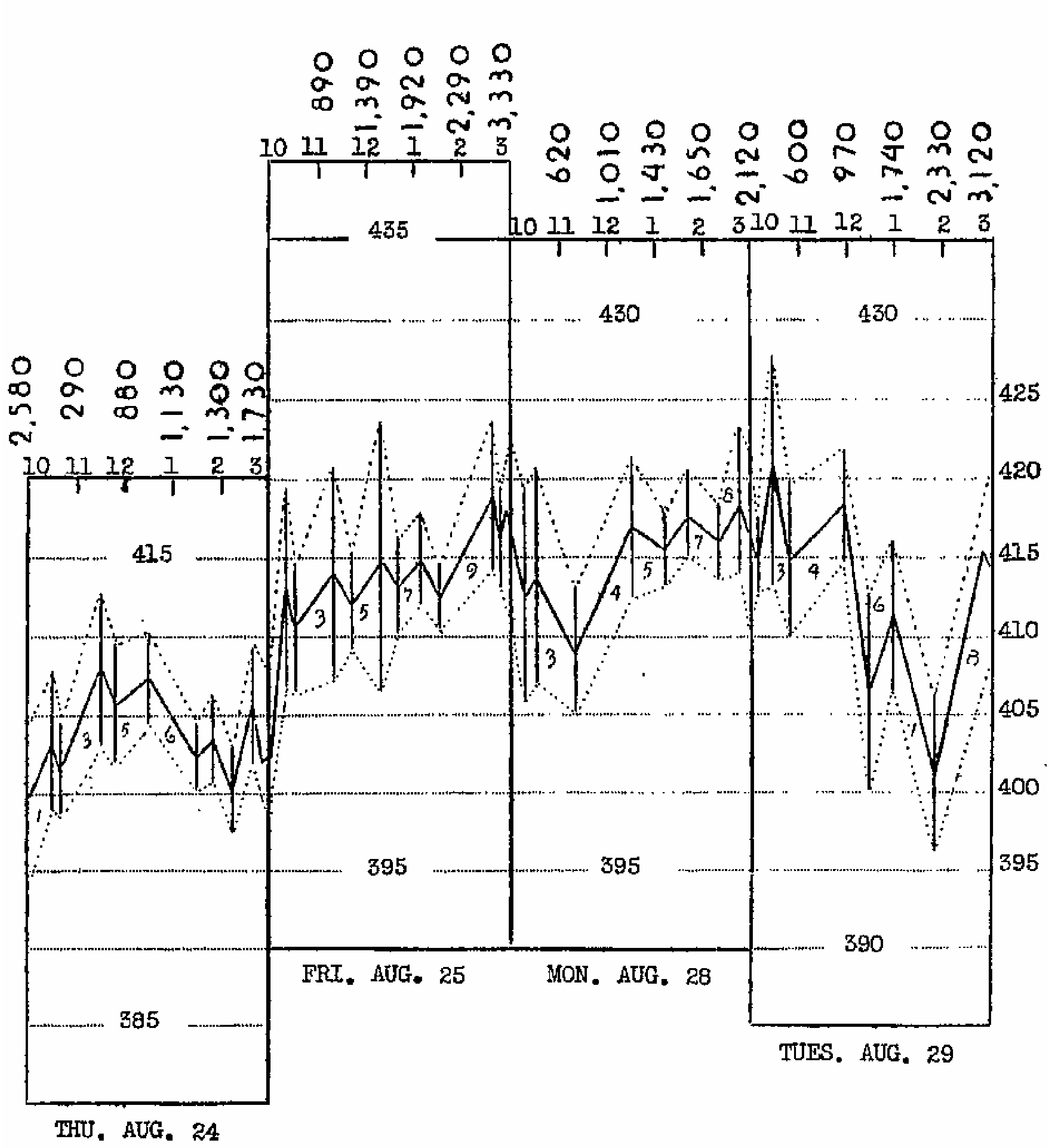
You will note that the 1 point figure charts, pages 32 to 35 carry trend lines and comments which are designed to aid you in understanding how to interpret the significant information afforded by these records when you begin to receive them daily from us as explained in paragraph 6, page 9. From these notations it will be seen that the principles employed in reading the action of the five leaders are identical with those used in analyzing any other chart (Sects. 7M to 21M).

On Page 38 we present additional graphs to illustrate how the daily Wave Charts, when pasted side by side, reveal vital details of the market's action at critical stages; and to show how the cumulative impressions you get from studying these charts day by day afford important clues to impending changes of trend.

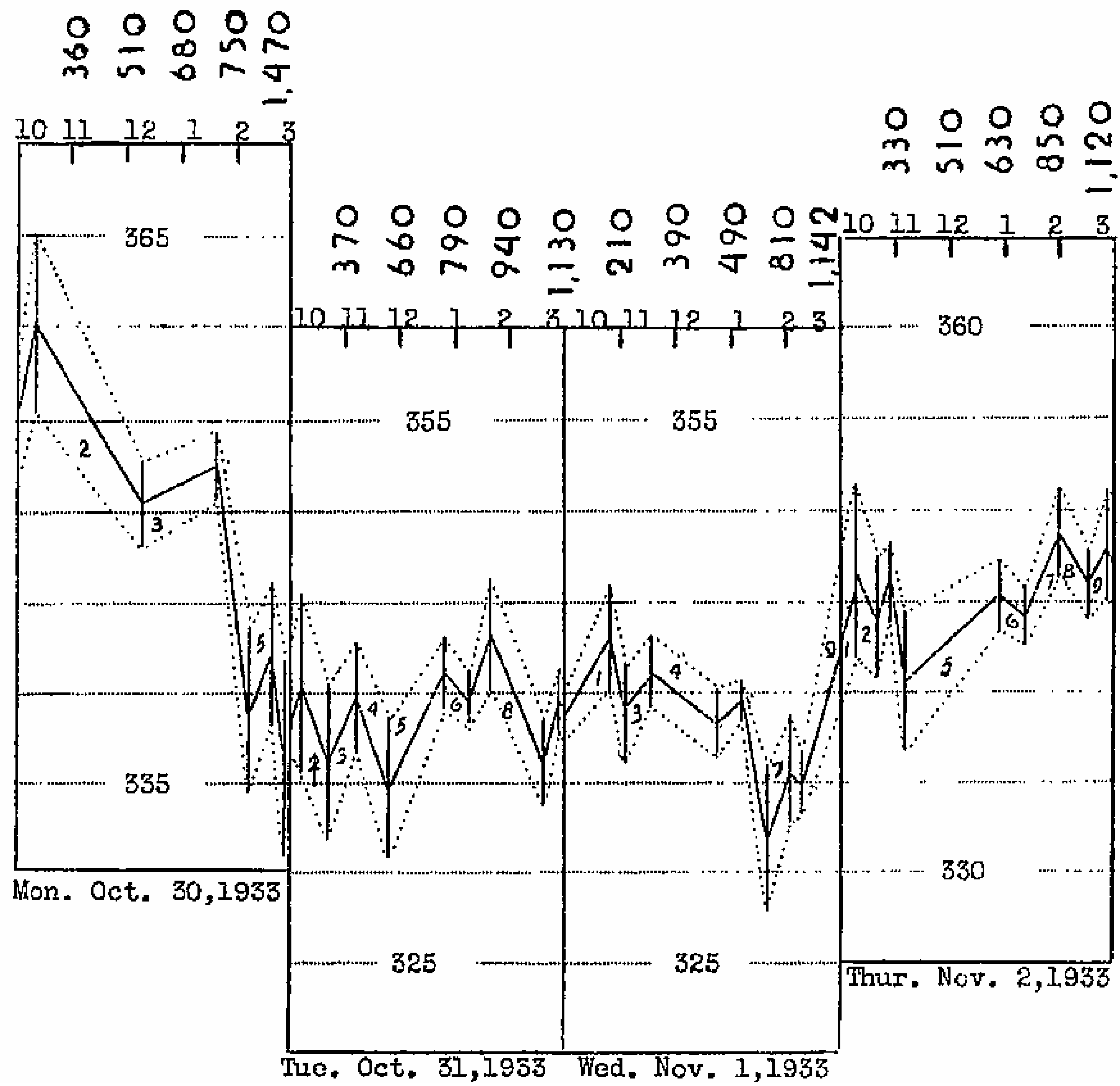
Observe, for instance, how the Wave Charts for Sept. 3rd and 4th, by fanning out the vertical bars representing the Times average (above the letter A) disclose certain significant details of the market's tape action which cannot be seen by examination of the composite average alone. According to the latter, the market seems to be rallying from the low point of Aug. 31 on very small volume. It is important to know whether this low volume means that offerings have become scarce as a result of the preceding reaction; or whether the small volume signifies poor demand, hence the forerunner of a further decline.

Examination of the Wave Charts for Sept. 3rd and 4th shows clearly that no offerings are coming out on successive down waves during these two sessions because the activity remains very small. In other words, the low activity indicates that the bears are failing to bring out any liquidation or selling of good quality in their efforts to drive the market down through the critical Aug. 28th-29th supports. Hence we must conclude that stocks have become scarce and so we interpret the September setback as a technical reaction which has been completed, thereby preparing the market for a new rise.

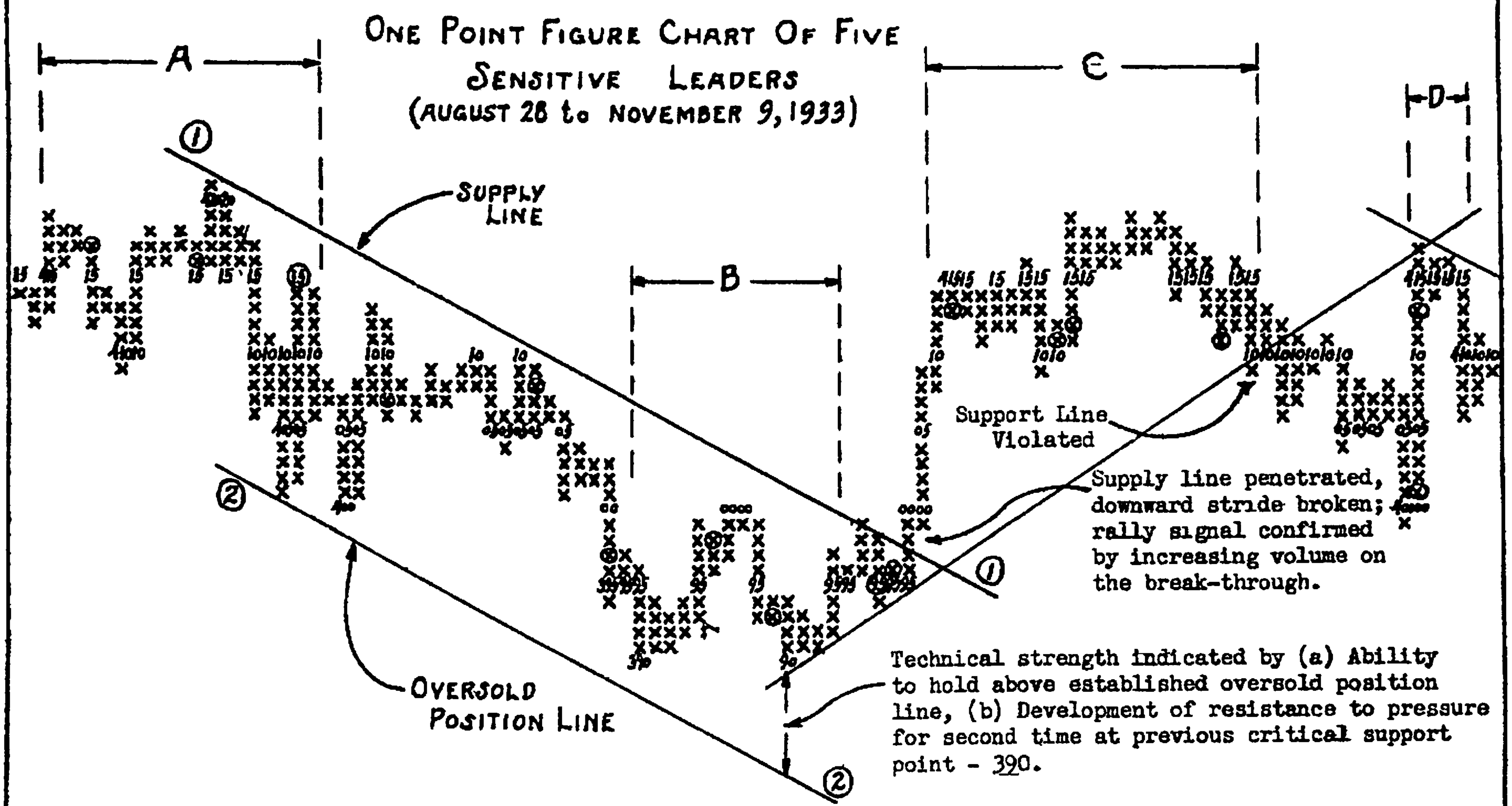
Conversely, when the Composite Average reaches the new high around 109 (under B), examination of the daily Wave Charts for Sept. 17th to 19th shows clearly the inability of the bulls to attract a further following. Note especially how the opening bulge of Sept. 19th is immediately checked at a lower top add how this upthrust is promptly met with a deluge of offerings as shown by the continuing high activity on the down wave in period 2. That performance marks the culmination of the rise and the beginning of a substantial reaction.



Illustrating zone of distribution; inability to absorb supply and development of weakness; and showing how the Wave Chart reveals significant details of the market's tape action, preceding a turning point in the intermediate trend. (Compare with one point figure chart at A, Page 32.)



Illustrating zone of support; ability to absorb offerings and development of strength; and showing how the Wave Chart reveals significant details of the market's tape action, preceding a turning point in the intermediate trend. (Compare with one point figure chart at K, Page 35.)



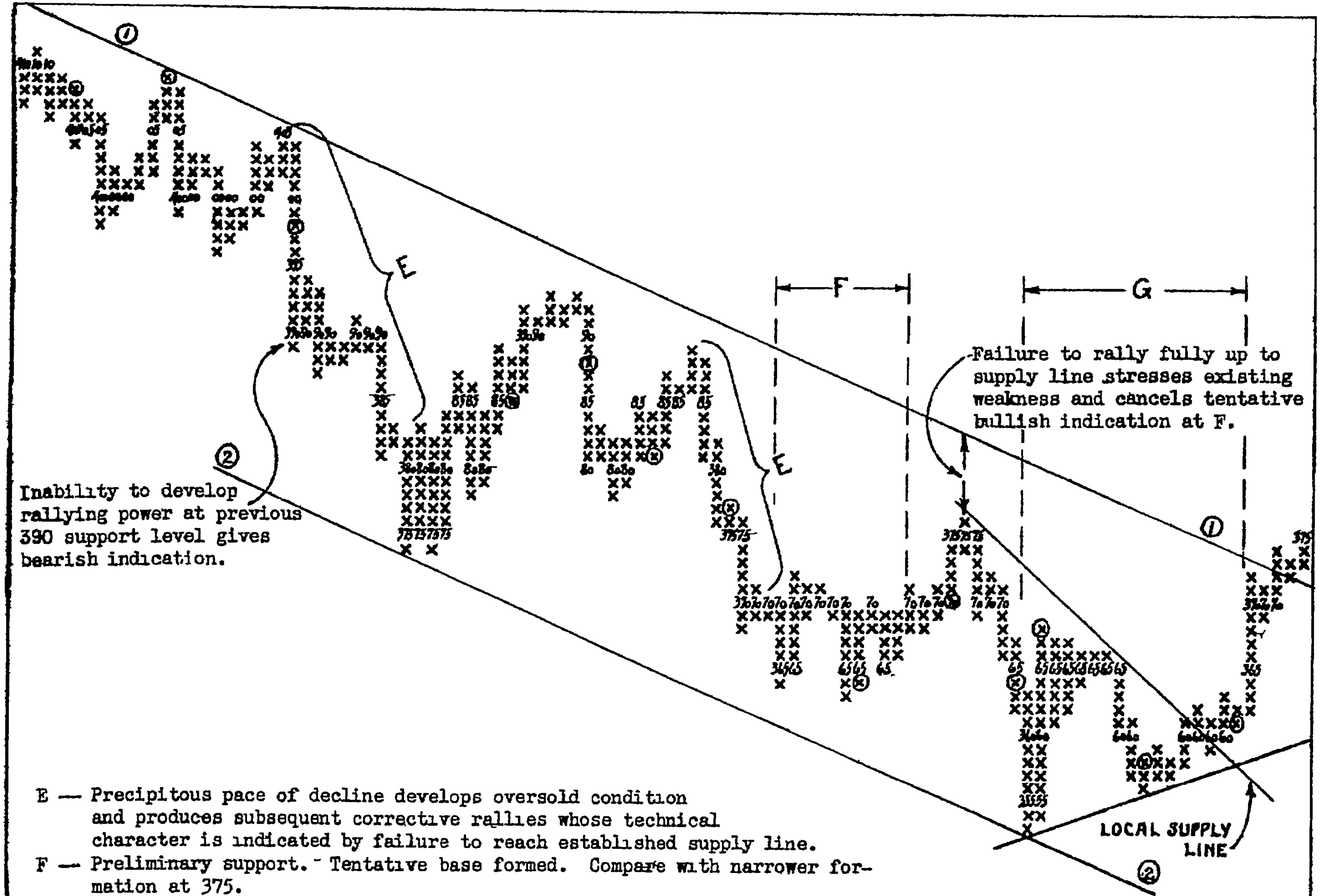
A – Zone of Supply:– Weakness indicated by inability to absorb offerings just under range of July tops; failure to make progress on heavy volume; diminishing activity on successive buying waves (see detailed action on continuous line chart, pg. 30).

B – Zone of Temporary Support.

C – Zone of Supply:– Selling signals set by inability to absorb offerings at previous critical supply level.

D – Quick upward thrust to catch shorts. Brief duration of rally to third lower top emphasizes increasing weakness of market's whole position after distribution at A and C.

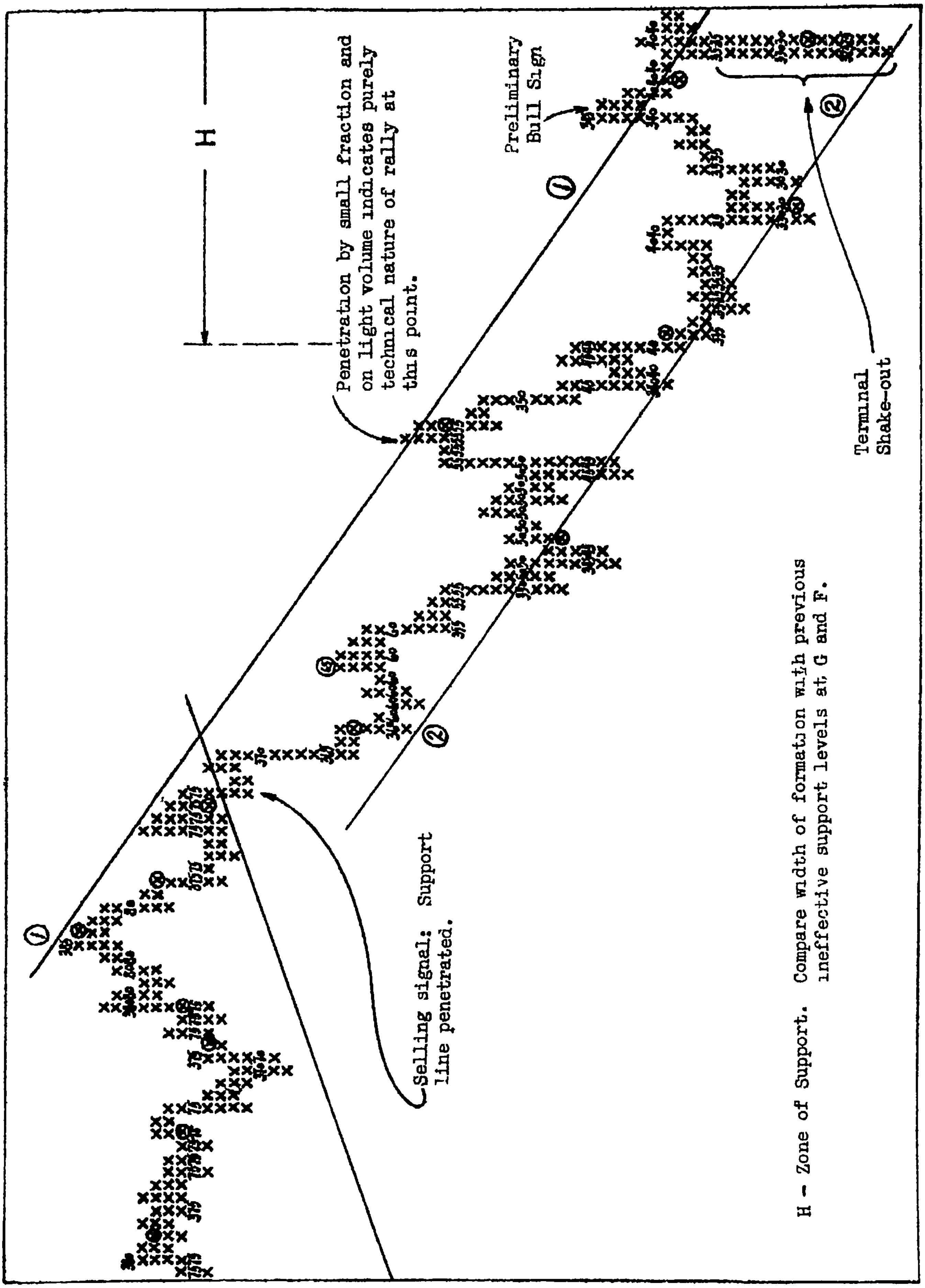
Note:– Small circles indicate end of each day's session, thus:– ⓧ .

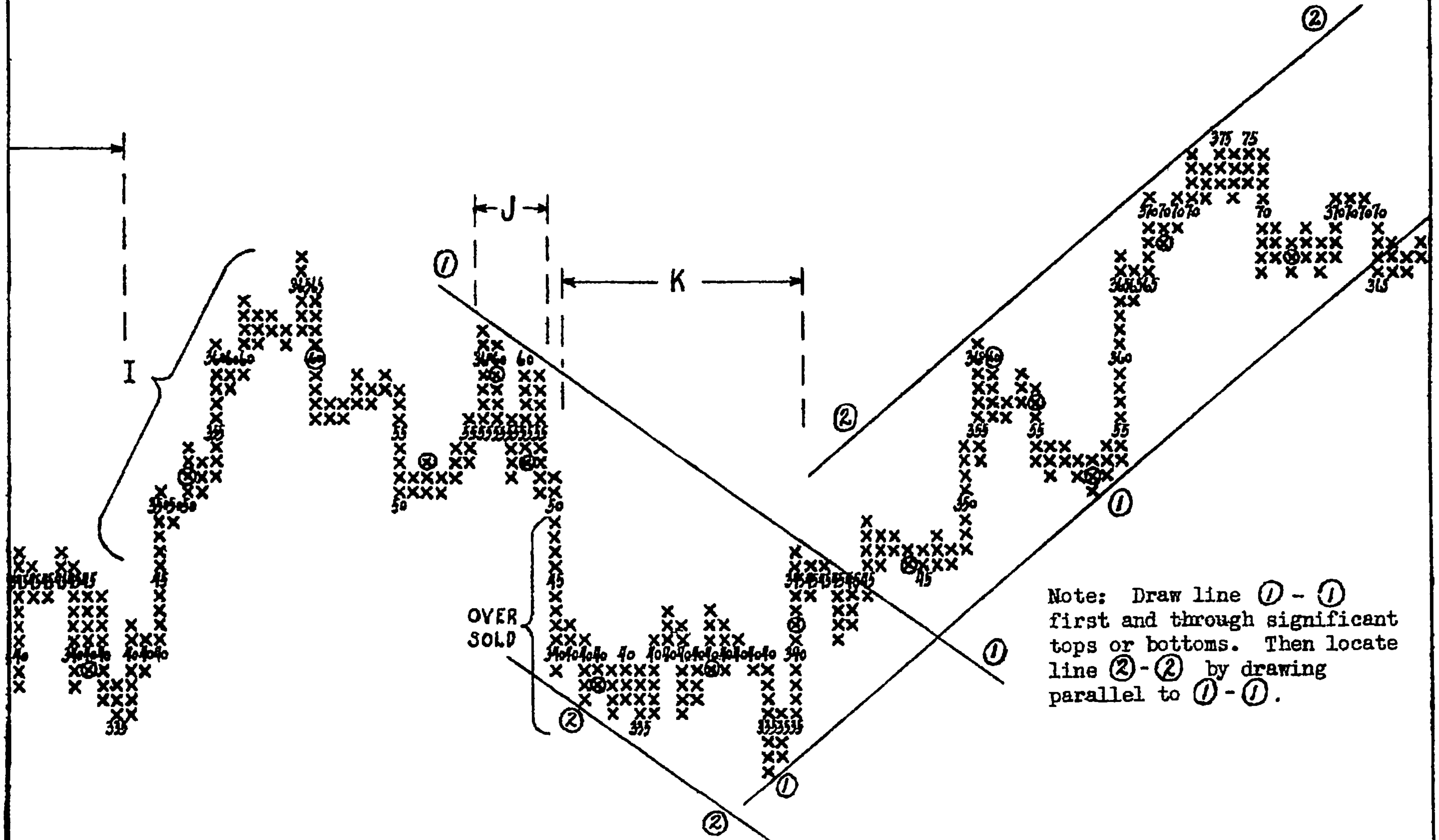


E — Precipitous pace of decline develops oversold condition and produces subsequent corrective rallies whose technical character is indicated by failure to reach established supply line.

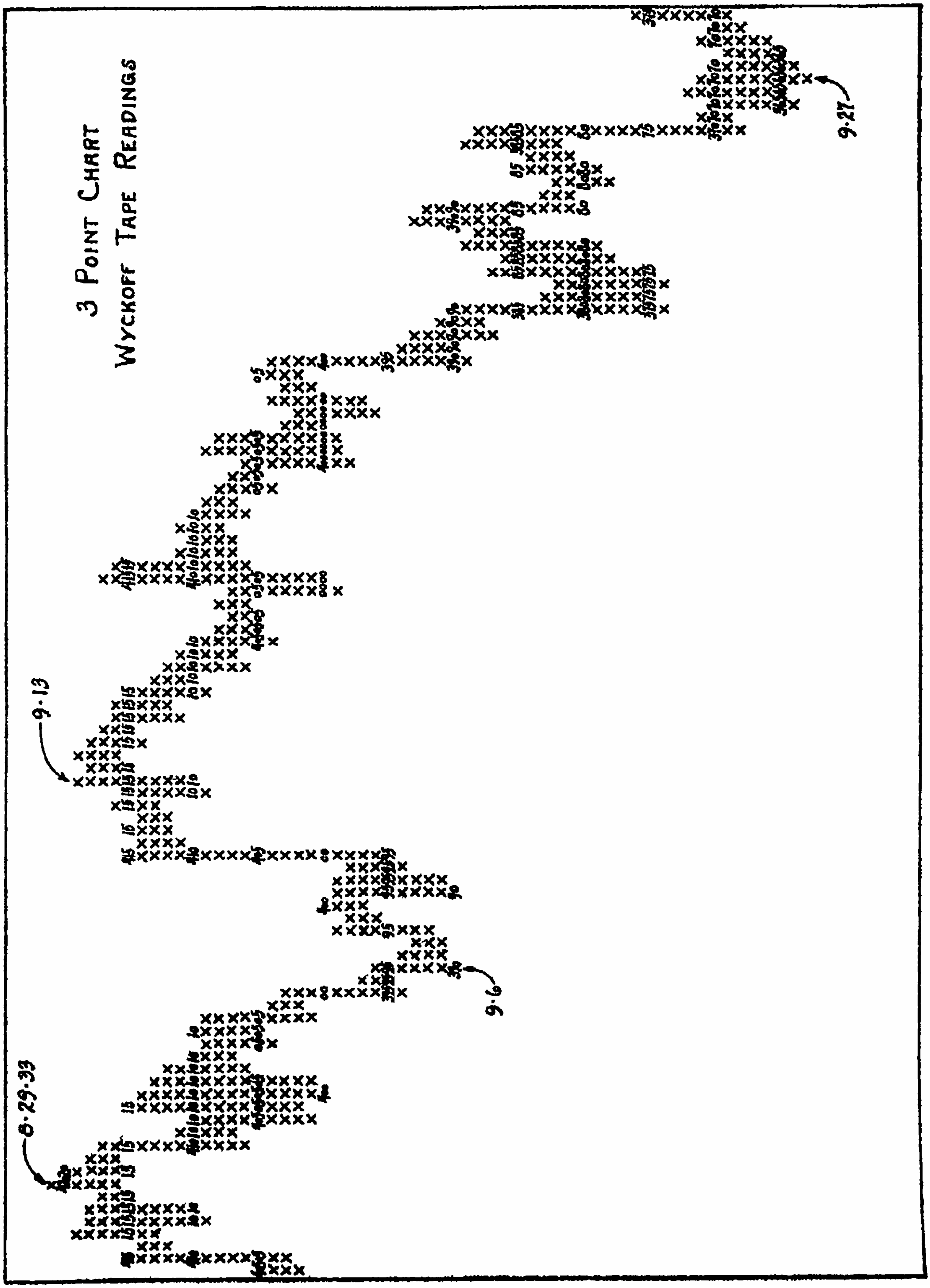
F — Preliminary support. Tentative base formed. Compare with narrower formation at 375.

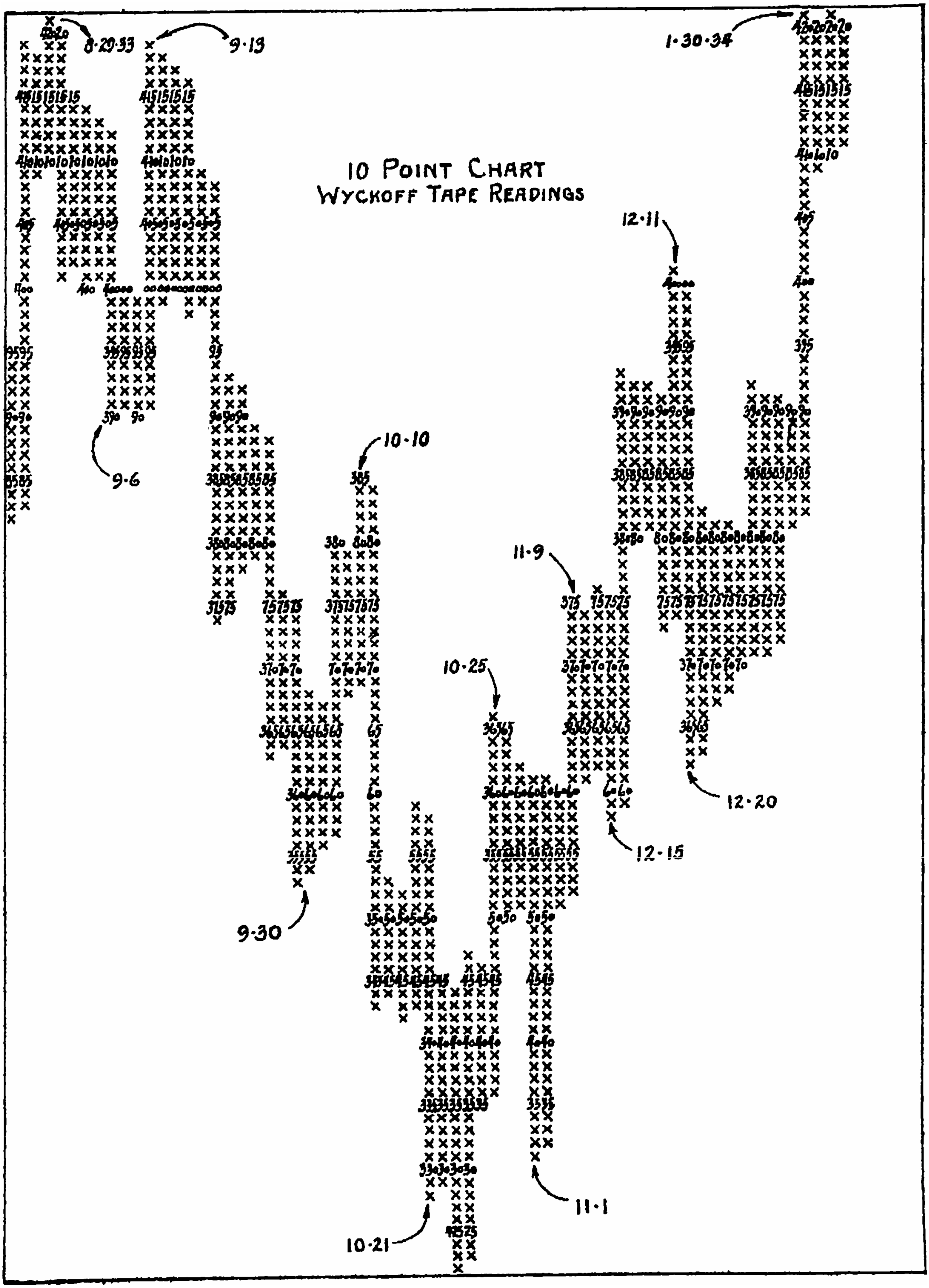
G — Support level, subsequently confirmed by rise through supply line at 372.


H
Penetration by small fraction and on light volume indicates purely technical nature of rally at this point.
Preliminary Bull Sign
Selling signal: Support line penetrated.
Terminal Shake-out
H - Zone of Support. Compare width of formation with previous ineffective support levels at G and F.



I – Steep pitch of rise creates overbought condition, inducing 50% (normal) technical reaction 365 to 350.
J – Inability to resume advance after normal corrective reaction indicates weakness.
K – Support appearing above previous 330–335 base constitutes bullish signal and spreads original base – (see continuous line chart, page 31, for detailed action at this point).


3 Point Chart
Wyckoff Tape Readings
8·29·33
9·6
9·13
9·27


10 POINT CHART
WYCKOFF TAPE READINGS
8·20·33
9·13
1·30·34
12·11
9·6
10·10
11·9
10·25
12·20
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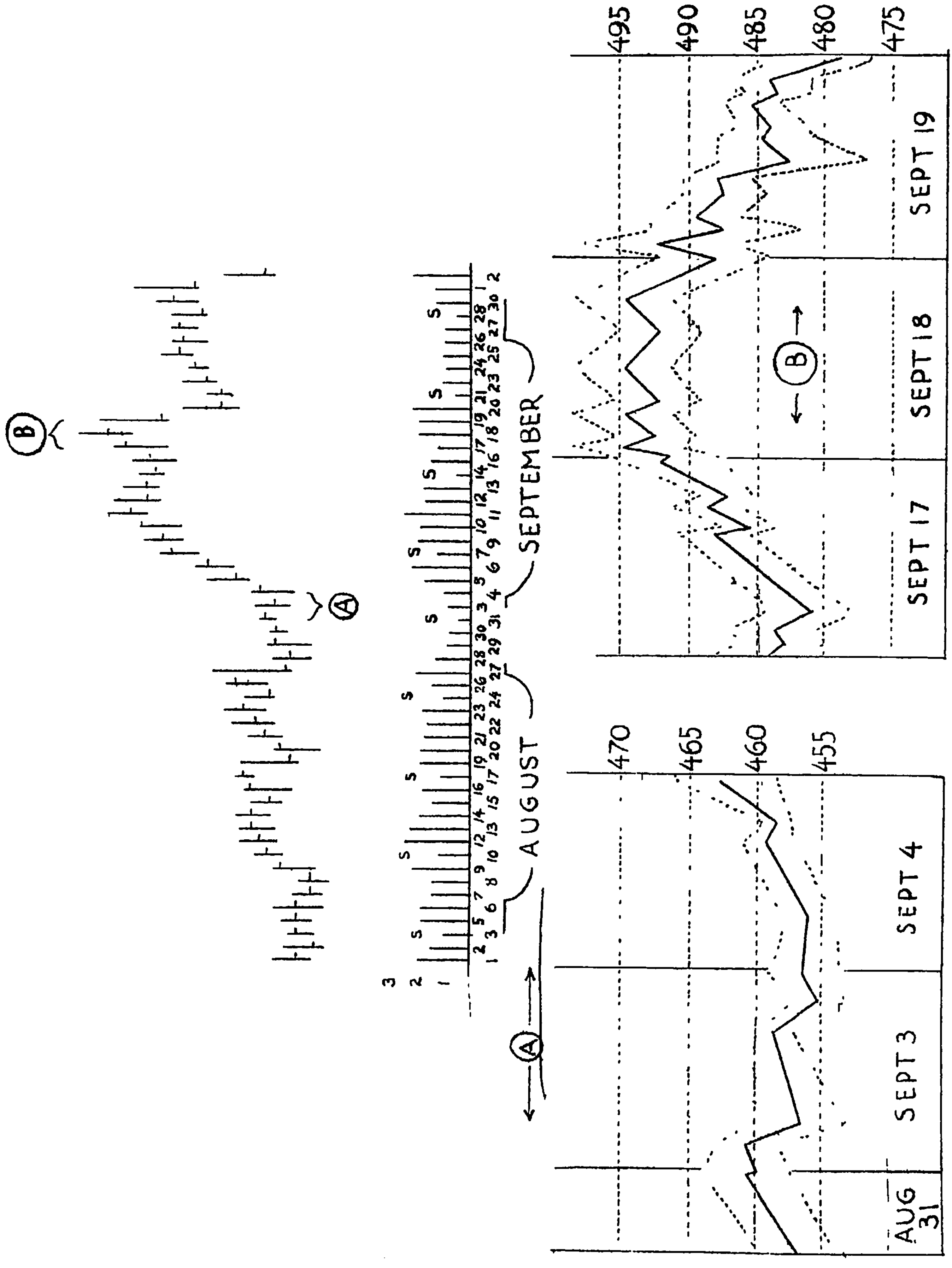
11·1
10·21



A
B
AUGUST
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SEPT 17
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SEPT 3
SEPT 4

HOW TO ESTIMATE DAILY CHANGES IN THE TIMES AVERAGE
FROM THE RICHARD D. WYCKOFF WAVE CHART OF TAPE READINGS

Some of our students have asked us how they may overcome the difficulty which arises from the fact that, because our Daily Figure Chart Report is mailed immediately after the close of the market, the report of the New York Times and Herald Tribune averages is necessarily delayed one day.

We therefore offer the following suggestion, which provides a method by which you can arrive at a satisfactory estimate of the high, low and closing prices of the N.Y. Times Average of 50 stocks, each day. This method will enable you to keep your daily vertical line chart of the Times average up to date, before the opening of the market the next day.

First, note that price changes in our daily TAPE READING PRICE INDEX (which appears in the fourth column of the table to the right of the Wave Chart) bear a fairly constant ratio to price changes in the N. Y. Times average. This ratio is approximately 4 1/2 to 1. That is, an approximate change of 4 l/2 points in the Tape Readings price index is roughly equivalent to a change of one point in the Times average.

Therefore, if you divide the high, low and closing prices of the Tape Readings price index by 4 1/2, you will get a rough approximation of the high, low and closing prices of the Times average. Note, however, that this ratio varies somewhat, from time to time. This results from the fact that the Tape Readings index is extremely sensitive. Hence, it may sometimes swing more sharply than the more sluggish Times average.

In order to compensate for these possible variations and adjust the ratio from day to day, all you need to do is to divide the closing price of the Tape Readings Index for a given day by the closing price of the Times average for that same day. The result will be the ratio which you should use to determine the high, low and close of the Times average for the next day from the Tape Readings index for this following day.

For example, on January 18, 1934, our Tape Readings price index closed at 404 3/8. The New York Times average for that same day closed at 90.44. Dividing 404 3/8 by 90.44, we get a ratio of 4.47.

Now, looking at the fourth column of the table of Tape Readings for the next day, January 19, we find that the index recorded a high of 414, a low of 407 3/8 and closed at 411 1/2. Dividing each of these figures by our ratio of 4.47, we get 92.6, 91.1 and 92.1, respectively, as our estimated high, low and close for the Times average. This compares with the official figures of 92.95 high, 90.76 low and 92.43 close, a reasonably satisfactory approximation.

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