

# Chapter 25

## **KELTNER CHANNEL**

In dealing with memory, something that is an aid to memory is called a mnemonic. A mnemonic is something you see that acts as a trigger to help you remember an entire word, sentence, or even a concept or idea.

Is there a name for something that is an aid to visualization? For a trader, perhaps it is the Keltner Channel.

At various times we have used Keltner Channel as an aid to vision. As with other band studies, Keltner Channel bands were designed to bring out certain aspects of the price action.

An excellent way to learn to trade by what you see can be via the creation of various channels utilizing “bands” to delineate the channel structure. Channels give a visualization of market phenomena that might otherwise go unnoticed.

Probably the simplest form of band utilization is to draw a trend line using a ruler and connecting the major price lows in a market to create the bottom of the channel. To visualize the top of the channel, draw a trend line connecting the major price highs.

Bands tend to show whether prices are high or low relative to where they have previously been. The history of bands has been progressive. By plotting lines around the structure created by the price action, a trader is able to create a visual envelope to aid his perception of what is taking place in a particular market. For example, Bollinger Bands are an outcome of a history of channel creating techniques. They were designed, among other things, to show the location of a specific number of standard deviations from a moving average of typical prices.

Since markets tend to fluctuate rather than move in a straight line, various techniques have been introduced to better capture the overall market action. The simple moving average has been used to create

bands that are shifted up and down by a fixed percentage. J.M. Hurst, an early pioneer in creating bands using, such a technique. This technique has been expanded upon to include the use of geometric or exponential moving averages, as well as various sorts of weighted moving averages.

Band studies have also been set up so that they contain a certain percentage of the data available from the price action.

With this method, the market itself sets the band width. We believe the technique was first developed by Marc Chaikin at Bomar Securities.

Any of the band techniques are both helpful and useful for trading, and each has its own strengths and weaknesses.

## **TRADING THE KELTNER CHANNEL**

As with other band studies, Keltner bands were designed to bring out certain aspects of the market.

Keltner bands are quite different from Bollinger bands and they must be traded in an entirely different manner. Do not make the mistake of trying to substitute one for the other simply because they look similar at times.

There is nothing magic about the Keltner Channel, no special feature to make it outstanding over and above other band creation techniques. We have used it because the band distance is calculated based on the volatility of a bar's true range from high to low. At Trading Educators we tend to favor studies that are based on volatility, because volatility is a very real factor in the price action, which is often overlooked by many traders who give a chart nothing more than a casual glance. More importantly, to use Keltner Channel, you must learn to understand its various idiosyncrasies.

The bands are created by employing a moving average of each bar's volatility from high to low, and then multiplying that moving average by a constant number to adjust the band distances from the moving average line. It is sort of a combination of other band techniques,

having some of the features of Hurst's bands, Chaikin's bands, and Bollinger's bands. Its principal weaknesses are twofold.

1. The constant is determined by the user.
2. Volatility is expressed as the difference between the high and the low of each individual price bar. A better way to measure volatility is to measure the movement from yesterday's low to today's high when today's high is higher than yesterday's high, and to measure the movement from yesterday's high to today's low when today's low is lower than yesterday's low. Such a measurement would most certainly take care of all gaps and be a truer measure of volatility. (Note: Volatility figures are available on a number of websites. [www.mrci.com](http://www.mrci.com) is one of them).

We have no idea who Keltner was, and we have no idea of how he (she?) used those bands. We found them in the software we use, and experimented with them until we achieved satisfactory results.

To accomplish this technique we use a 9 bar exponential moving average of the closes, with a multiplier constant of 1.9. Why 9 and 1.9? Because that moving average and that multiplier have worked for us and for others. The moving average may be simple or exponential. It won't make much of a difference which moving average is used. Exponential moving averages weight the most recent price action more heavily.

Rest assured there is nothing miraculous or supernatural about those numbers. Other combinations of numbers would probably work equally well. The trick is in learning how to use Keltner Channel at one setting and stick with it until it eventually proves to be of no value.

What are the characteristics of the Keltner Channel? In sideways markets, the band distance narrows due to falling volatility. In trending markets, the band distance increases, at least until volatility reaches some sort of equilibrium. From there on, the bands remain relatively the same distance apart. There is not much more to it than that in the way we use the Keltner Channel bands. In fact, there are times when you may find that you pretty much ignore the bands and stick mostly with the moving average. The bands are as stated

earlier, primarily a visual aid. We have found that not everyone is readily able to see (or notice) increases and decreases in volatility. Although the moving average is created by the price action, the number of days (9), and the band width (1.9) are from our own imaginations. It is we who have chosen to use 9 and 1.9. There is nothing of the market in those choices, and we're not about to bow down and worship something created by our own hand. Because of that, we regularly break any rules we may have associated with the Keltner Channel study in favor of common sense and safety.

Why then are we including the bands? Because they are a good visual aid. When you see the results of trading with them, and have tested them yourself, you will be able to decide whether or not they are worth using. As always, you must experiment with the bands, and you must be comfortable with them. You can try the bands at different widths, and you can change the moving average. This can be done in accordance with the price activity you encounter for each market.

Keep in mind that we are dealing with a ***channel*** as opposed to an ***envelope***. By its very nature, a channel implies that a market is trending. That means you have to know how to define a trend. You have to know what a trend looks like. The trend is your filter for the Keltner Channel. Of course, the sooner you are able to detect a trend, the sooner you can effectively use the Keltner Channel study as we will present it in this chapter.

The Keltner Channel study works equally well in any time frame. The more trending the market, the better chance for success using the Keltner Channel.

## **KELTNER CHANNEL METHODOLOGY**

**Seasonality and Cyclicity:** Where possible, we want to enter trades during those periods when a market is known to trend. Some futures have seasonal tendencies, so it is appropriate to use seasonality and cyclicity (are these words?) whenever and wherever possible as a filter for your trade. Since seasonality and cyclicity are really involved with ***timeliness***, if there is a particular

**time** of day when a market tends to trend, you should apply that knowledge to any day trading efforts.

**Bands:** The upper and lower Bands must be clearly trending in the same direction at the time of entry into the trade.

**Moving Average:** The moving average must be trending in the same direction as the bands at the time of the trade.

The tradable channel is found between the moving average and the upper band in an uptrend and the moving average and the lower band in a downtrend.

We are looking for general containment of retracements to the moving average line.

**Price Bars:** Price bars must retrace in the following manner:

1. Touching, or if you choose, very close to and almost touching, the moving average. If you elect the very close method, it will be strictly a matter of perception on your part.
2. Penetrating the moving average, but by less than 1/2 the distance of the width of the channel opposite to the trend.
3. Price bars must conclude with an intraday reversal in the direction of the trend before an entry can be considered.

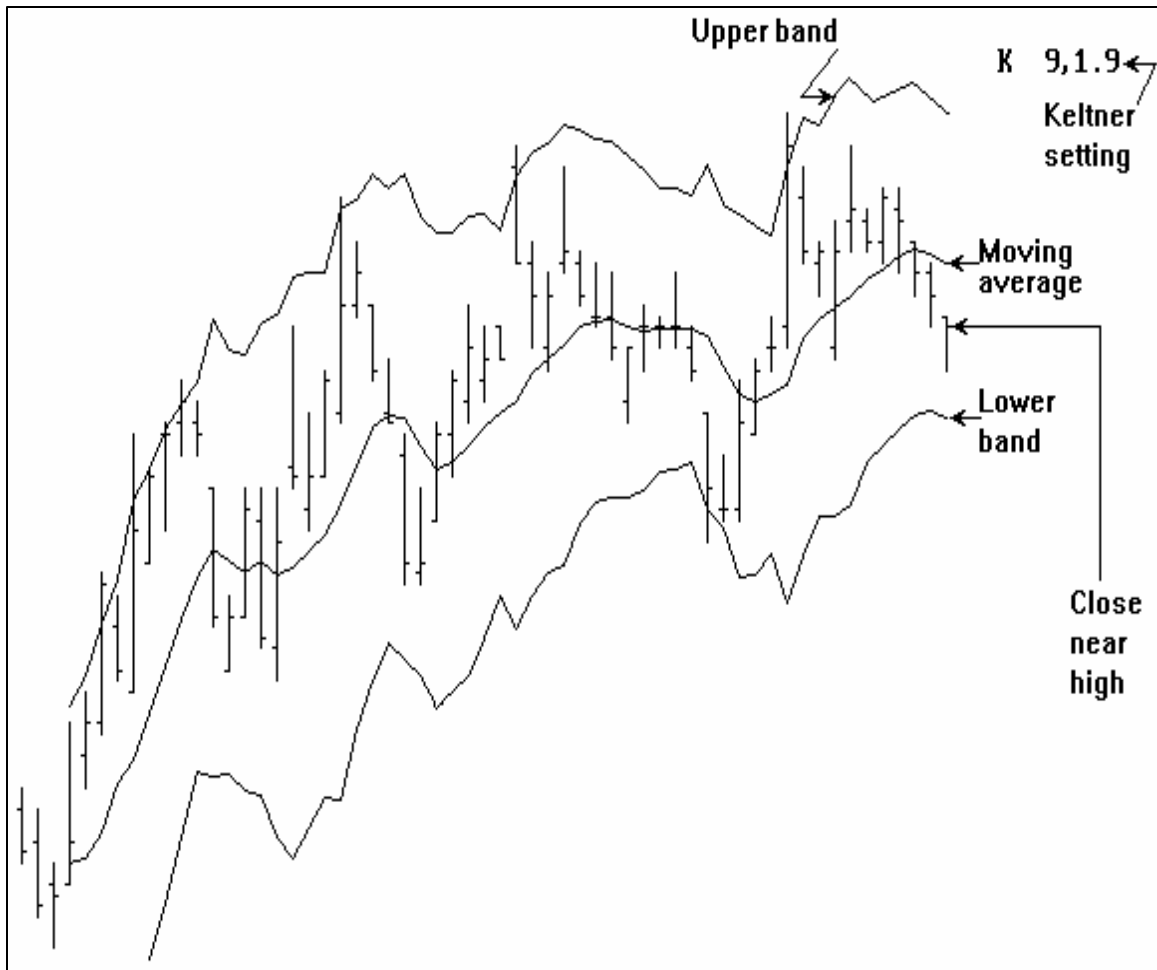
**Exit Rules:** We've shown you various exit techniques throughout the course. We cannot tell you where to place your exit stop, or even whether you should use a stop in the conventional sense. However, you should use common sense. You should never risk more than you can afford with your stop. You should have a plan for extracting reasonable profits from a trade. Trade with objectives whenever possible.

**NOTE:** How to trade without using stops; how to trade with objectives; when and how to add-on to a trade; how to maximize your wins and keep your losses small; how to manage money, risk, the

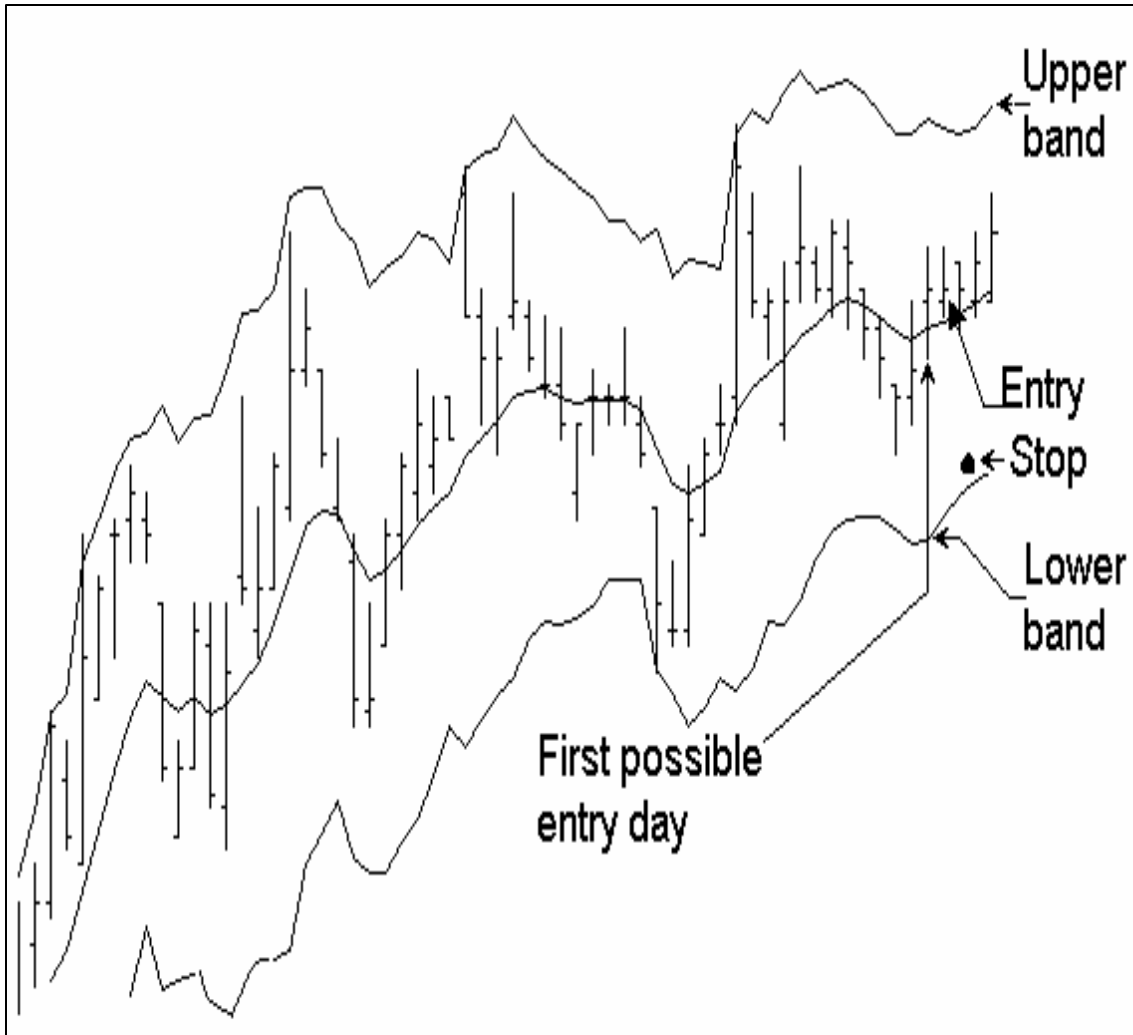
mechanics of a trade, yourself, and much, much more, are all taught at Trading Educators seminars.

**WARNING:** This methodology is not meant to be mechanized. There is a degree of human intervention and perception involved. Using this method of trading is subject to judgment. The application of the methodology will become more clear as we go through a series of charts.

In the rest of this chapter we are going to present a single trade. However, the trade was what we consider to be long term. It was definitely not a day trade. Following is the chart:

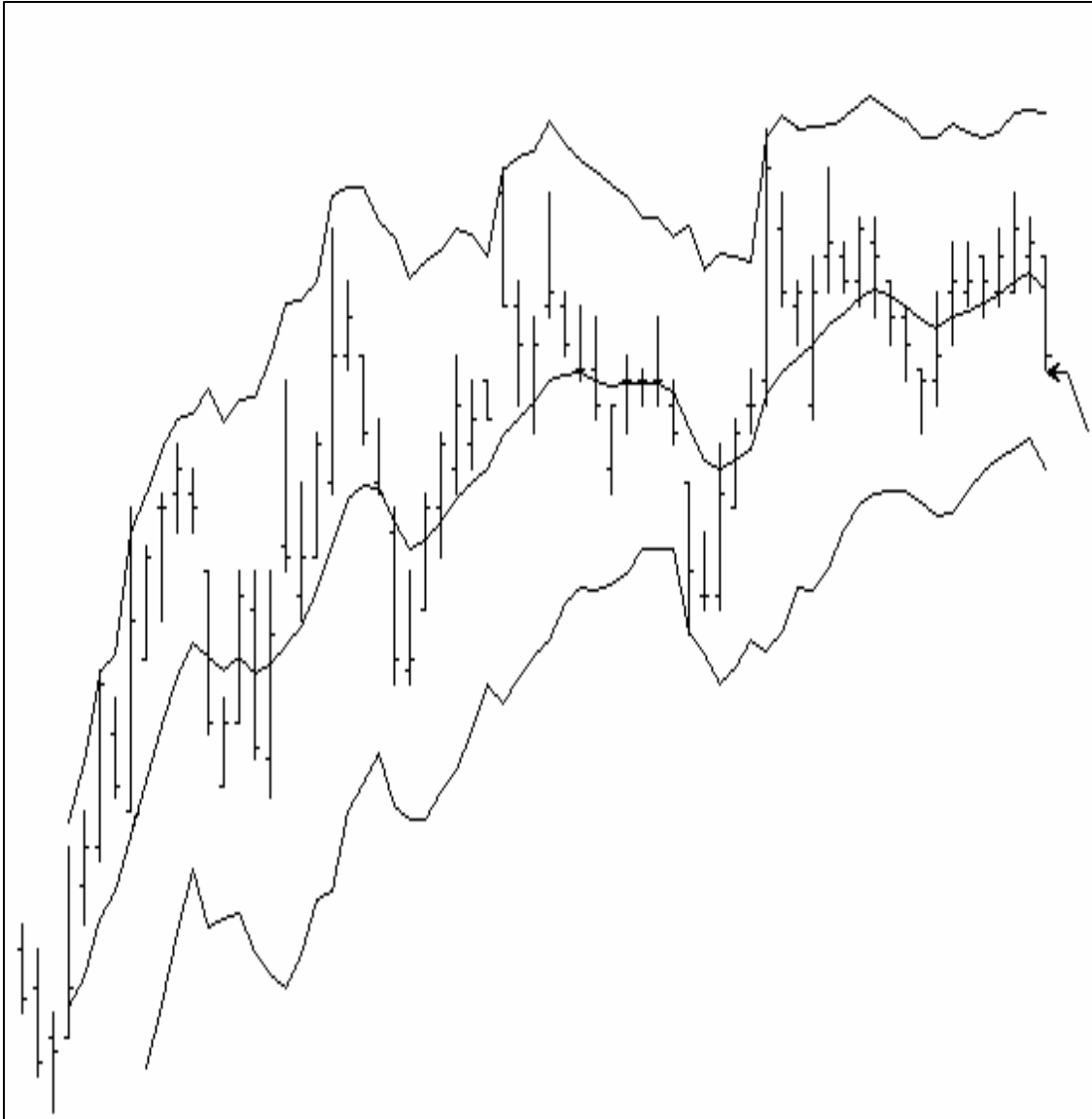


You can see that, in terms of the Keltner Channel method, there is no buy signal. The bands and the moving average are all turned down. Next, let's look at the situation five days later.



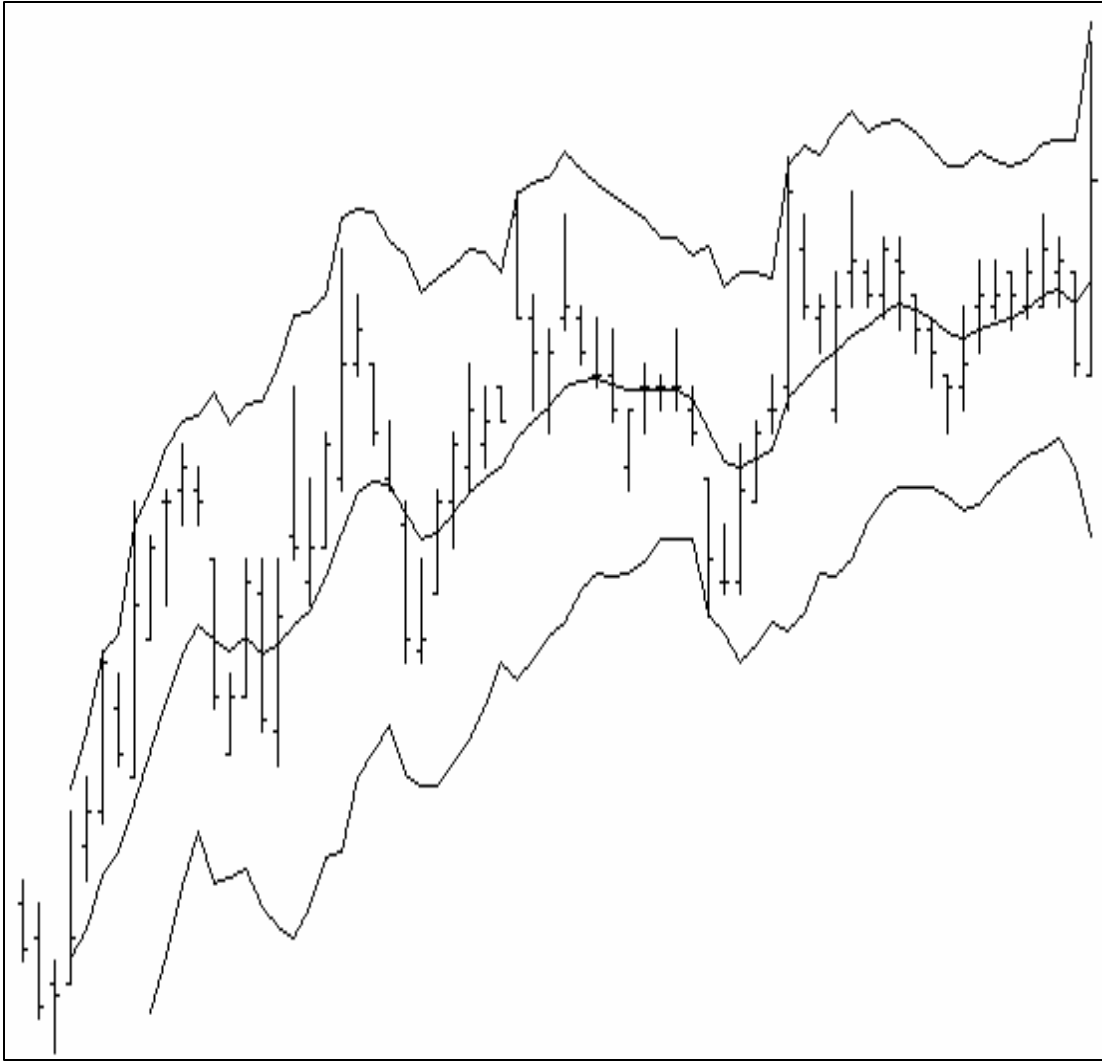
Five days later the situation has changed. The bands and the moving average are rising. Prices have retraced to and made a minor penetration of the moving average, and then reversed by closing higher than they opened. This is our signal to get long. If we were watching intraday, we could have gotten long before the close. If we are end-of-day traders, we enter the market no sooner than 15 minutes after the open. In either case, we'll assume an entry at 22.50. Our stop is at our comfort level, we were willing to risk at least \$1,000 on a trade taken from a daily chart. The stop is at \$21.50. Looking back at what we labeled "the first possible entry day," we can see that the close in the upper part of the day's price range was significant. Prices had reversed intraday sufficient to come off their lows and close high. We enter long and, as prices move up, we take some profits out of the market, and move our remaining stop to break even.

We're stopped out of our remaining contract(s) at breakeven the day before prices come crashing through the moving average. Do we now have a sell signal? Not according to the rules. Prices have reversed themselves and penetrated the moving average, but before we could be interested in them again, this time for a possible downward move, we would need to see a retracement by prices back to the moving average line.



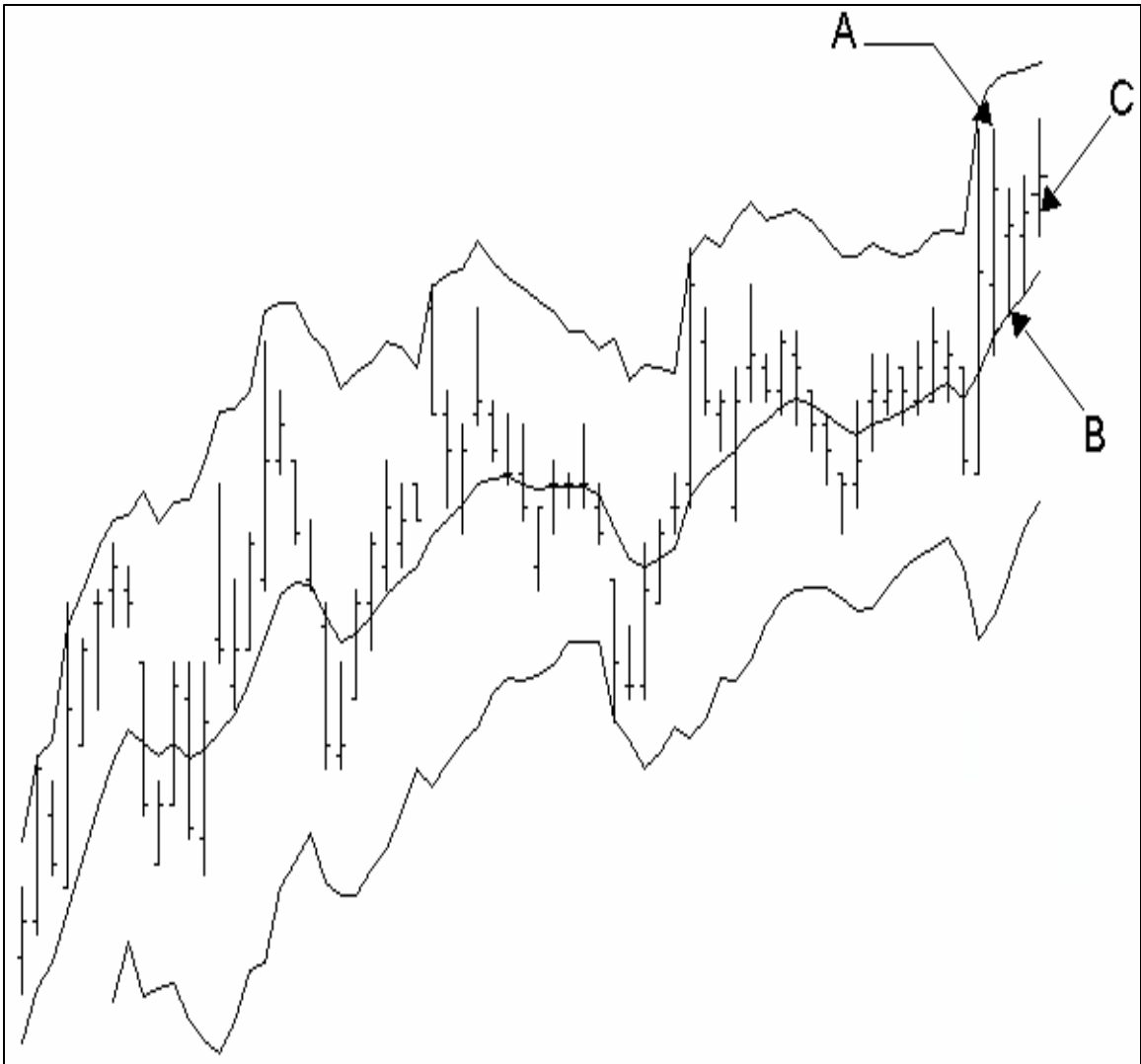
Let's see what happened next!!





Wow! What's going on here? Can't these prices make up their mind which way they want to go? Actually, that close was mighty weak for such a large day.

Will we get a retracement to the moving average so that we can try again to go long?

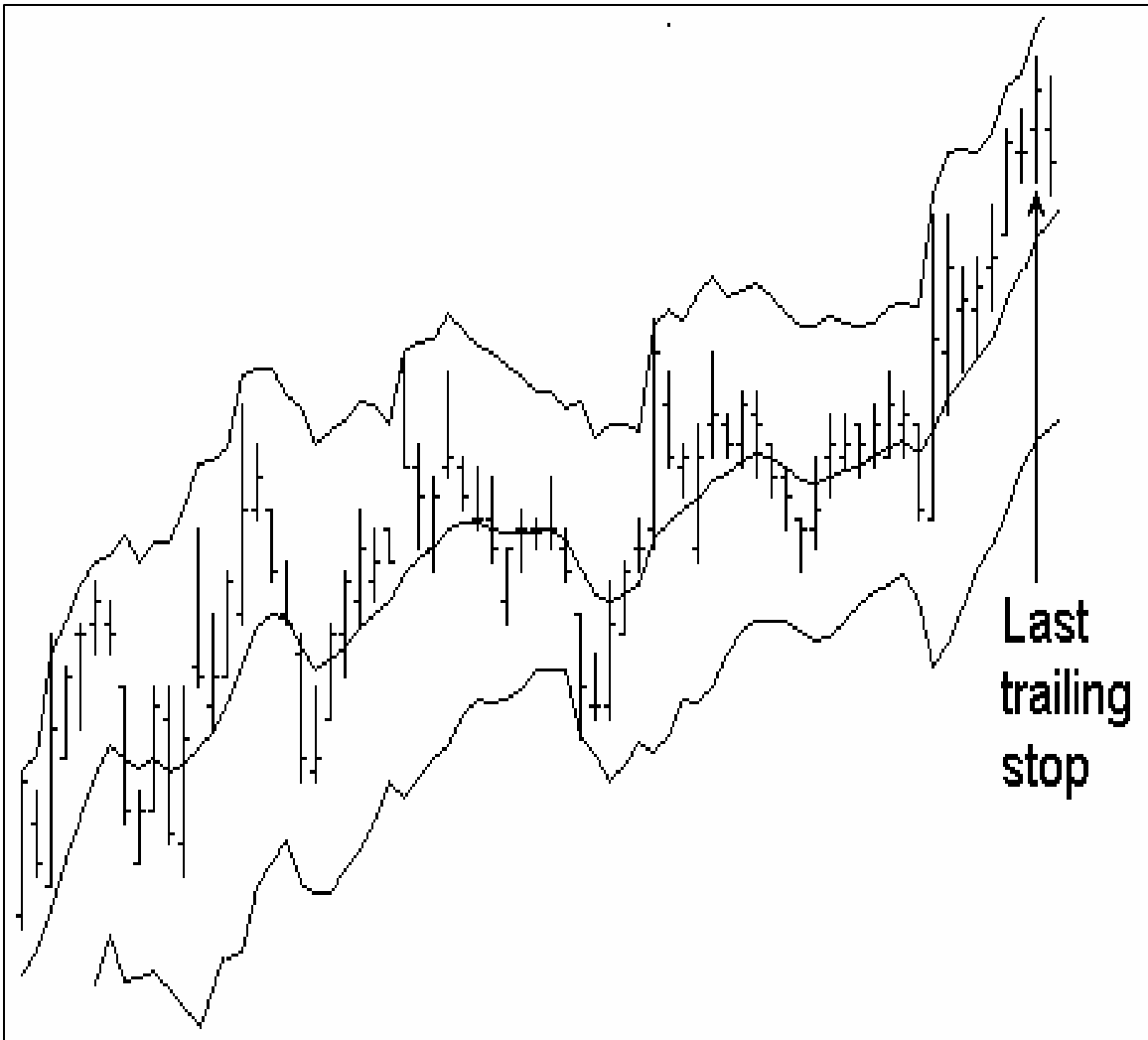


Taking it a day at a time after the “big” day:

A: We cannot use day “A” because it violates our second rule for the retracement: “Penetrating the moving average, but by less than 1/2 the distance of the width of the channel opposite to the trend.” “A” is more than half way across the upper channel.

B: Inside day. Prices touch the moving average line and close just 1 tick less than half way across the width of the channel. That is good. Day “B” is the bar that gives us our entry signal for day “C.” We enter 15 minutes after the open on Day “C.” We risk \$1,000 on this position.

The next chart will show you how it all came out.



After entering the trade:

- As soon as possible, cash some contracts in order to take profits and be paid for trading. Place a stop at breakeven.
- As soon as there is a low that is higher than breakeven, trail a stop just beneath the low of each day, until stopped out.

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