

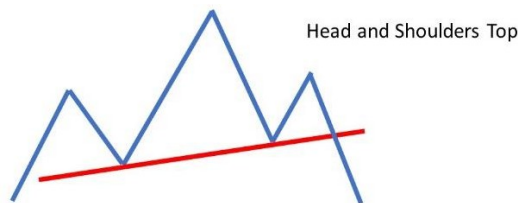
## Brief introduction to the most important classical price formations in formation theory

**Formation theory** is one of the oldest areas of technical analysis. Its aim to use formation recognition to recurring price patterns and draw conclusions about possible future price trends.

### Shoulder-head-shoulder

The **shoulder-head-shoulder** formation is considered the most important and most reliable chart reversal formation. It is the best known of all price formations. At the end of a long-term upward trend, it indicates the end of this movement and signals its reversal into a downward trend. The shape of this reversal formation is reminiscent of the upper body of a human figure, hence its name.

In technical terms, the shoulder-head-shoulder reflects three upward movements and their technical corrections. The first price rise forms the left shoulder. This is followed by a technical correction, which is followed by a further upward movement that must clearly exceed the first price peak. The subsequent, sometimes strong correction pushes the price sustainably below the top of the left shoulder, making the head clearly visible. The third and final price rally is characterized by the fact that it no longer reaches the height of the head and later represents the right shoulder as part of another technical reaction.



If you now connect the low points between the shoulders and the head, you get what is known as the neck line. The neck line serves as a support line that can rise or fall slightly.

Important: Only when prices (basis: closing price) clearly broken through the neckline from top to bottom after the right shoulder has formed is the shoulder-head-shoulder formation considered complete. If, on the other hand, the neckline remains unbroken, the prevailing trend remains intact.

However, a shoulder-head-shoulder formation does not form overnight. It often takes several months to actually bring about a major trend reversal.

Despite a comparatively long time horizon, shoulder-head-shoulder formations have the same significance in the daily tick chart, even if they often only take a few hours to form.

Primary trend reversals are usually only found on weekly charts. Here, the formation often takes one to two years to reach its final completion and is only considered complete when its neckline has been broken by at least 3%.

After breaking through the neckline, a technical correction can often occur once again, with prices returning to the neckline and then finally rejecting it. It is important to note that the neckline must not be crossed significantly.

**Complex shoulder-head-shoulder formations** sometimes have several right and left shoulders, or a double head. These "degenerations" are the result of nested shoulder-head-shoulder formations. They are usually only found at the end of primary trends and are often difficult to assess. Finding the trend line in particular often causes considerable difficulties, as this complex formation can often have several necklines. Sometimes these complex formations are also the result of a previously unsuccessful trend reversal. This can lead to considerable difficulties in analysis, as an initially given trading signal is withdrawn, but later triggered again.

The possible **price potential of a shoulder-head-shoulder formation** depends, as with almost all formations, on the height of the formation. It should be emphasized once again at this point that a target level is not intended as a profit-taking point, but only represents an order of magnitude for determining the relationship between profit and risk. Furthermore, a price target is an empirically determined value that cannot be scientifically proven. In fact, only around 50 to 60 percent of all price targets are actually achieved.

The price potential of a shoulder-head-shoulder formation corresponds to the distance from the top of the head to the neckline. The actual target level is obtained by subtracting this calculated distance from the price breakout point at the neckline when the formation is completed, or adding it in the case of the opposite type of formation.

This makes it clear that a small shoulder-head-shoulder formation has a small price potential, while a large formation has a large potential.

The explanation as to why the distance between the head and neckline is particularly important for determining the price target could perhaps lie in the fact that this market phase has attracted the most buyers. If buyers remain in their position in the further course, the closing out or turning of the position below the neckline must lead to considerable price declines, which correspond to the price increase of the previous buying phase above the neckline. This applies analogously to the reverse shoulder-head-shoulder formation.

Although shoulder-head-shoulder formations are clear trend reversal formations, in rare cases also **special forms** occur: the shoulder-head-shoulder formation as a

Trend confirmation formation. However, there is no need to fear confusion with reversal formations, as a shoulder-head-shoulder consolidation in an uptrend takes the form of a reversed shoulder-head-shoulder formation and, conversely, in a downtrend appears as a normal shoulder-head-shoulder formation. The same rules apply to the respective signals as for normal reversal formations. However, the minimum price targets triggered by the shoulder-head-shoulder consolidation formations are not as reliable as is usual for reversal formations and are sometimes quite low, as the chart is usually very flat.

Although a shoulder-head-shoulder formation is one of the most reliable formations of all, not all formations deliver what they promise.

If a price trend does not behave as expected, the question arises as to when a **misperformance** can be assumed.

The first rule is: if the neckline is not broken through, the formation is not considered to have been completed anyway, so that it is not possible to speak of a clear failure. A first concrete indication of a possible failure of the formation is given when prices return to the neckline after breaking through it (even if it already amounted to three percent) and cross it again from the other side. This is enough for many chartists to question the formation as a whole. There is no doubt that it loses reliability in this case, especially with regard to its price target. This also applies if prices have fallen below the neckline but "creep along" it for days or weeks and then cross it again.

However, a shoulder-head-shoulder formation is definitely considered invalid if the trend line from the head to the right shoulder is overcome as long as it runs above (below in the case of the reverse type) the neck line.

There is still no doubt that the formation will fail if the top of the right shoulder is overbid (or underbid in the reverse shoulder-head-shoulder formation).

Note: Many chart-oriented market participants open positions before the formation is completed, in anticipation of its completion, in order to achieve the highest possible profits. However, this premature trading can lead to unpleasant surprises. Therefore, if you absolutely want to trade before the completion of a formation, you should definitely place appropriate stop-loss orders. It must always be borne in mind that in an incomplete formation the supply-demand relationship has not yet been decided and the price trend may therefore not behave as expected!

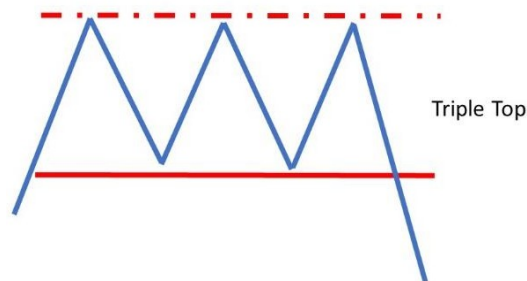
### **Double or triple peak or double or double or triple floor**

Many characteristics of the shoulder-head-shoulder formation can also be easily applied to other trend reversal formations, including the **double or triple top or the double or triple bottom**. These formations do not occur very frequently as they are basically variations of shoulder-head-shoulder formations. The main deviation from the shoulder-head-shoulder formation is that the shoulders roughly the same height as the head. This means that a

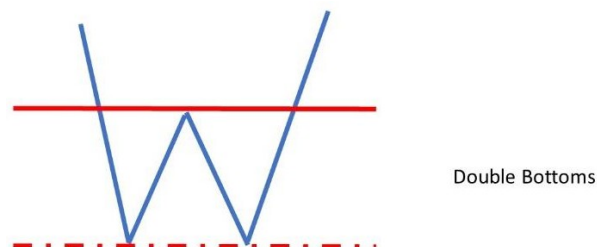
triple top has three clearly recognizable price peaks that are interrupted by price valleys. The same applies to the reverse formation, the triple bottom.

This slight difference to the shoulder-head-shoulder formation means that the basic message of both charts is the same.

The decisive sell signal to complete the triple top formation is given when the price falls below the lower of the two previous troughs from the third top and falls significantly below it. The formation is only completed when this requirement is met, because as long as there is still demand below the valleys, the upward trend can continue at any time. (See rectangles) The same applies to the triple bottoms.



Both formations described in this section must fulfill minimum requirements before they can be interpreted as what they are. First of all, it must be ensured that at least two months have elapsed between the formation of the individual peaks or bottoms and that the respective corrections in between amount to at least 10 percent. In addition, the peaks (or bottoms) should be at approximately the same price level, i.e. in relation to the first peak (bottom), the respective deviation of the maxima must not exceed 3% of the price value.



Although the formations just described occur very rarely, they are extremely reliable and usually deliver what they promise.

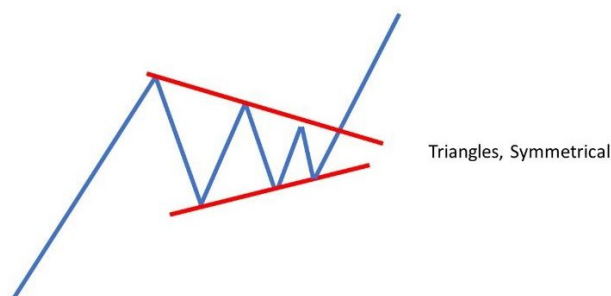
In contrast, double tops and double bottoms occur somewhat more frequently in charts. As the price trend generally occurs in waves, young analysts in particular tend to find double tops and double bottoms where there are none.

The minimum potential of double peaks/bottoms and triple peaks/bottoms is determined in a similar way to the shoulder-head-shoulder formation. The decisive factor is the height of the formation. Subtracting from or adding to the signaling price breakout point gives the minimum price target for both double and triple combinations.

**False signals** only occur relatively rarely with both triple tops/bottoms and double tops/bottoms, provided the formations actually meet the minimum requirements. The danger is that these minimum requirements are often disregarded, as the chart pattern is very easy to identify and therefore often interpreted prematurely by some analysts. Another common mistake is that traders a position after the second peak (bottom) has been completed, in the expectation that it actually a double peak/bottom. If the price movement starts to approach the high (low) a third time, the positions must be hedged with stop prices. Under no circumstances should you wait until the last peak (bottom) has been surpassed (undercut) before closing out the position.

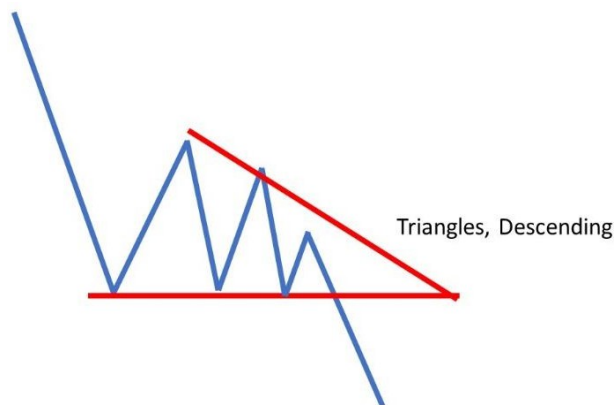
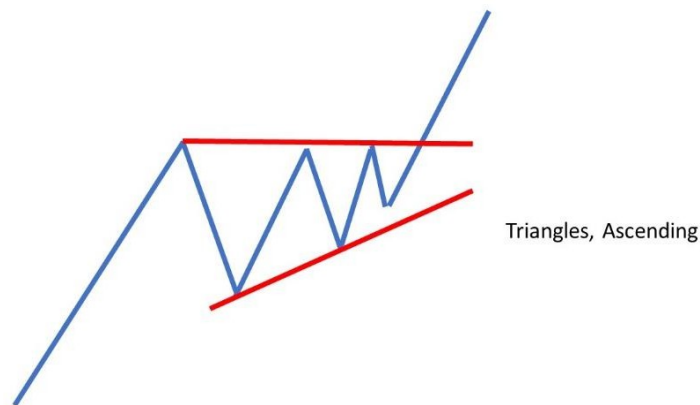
## Triangles

**Triangles** cannot be clearly classified in terms of a trend reversal; in practice, they occur both as trend-reversing and trend-confirming formations. In terms of price prediction, triangles are divided into three groups: symmetrical triangles, rising triangles and falling triangles.



In principle, triangles are nothing more than the combination of a rising and a falling trend line, or an upward or downward trend line with a horizontal trend line.

What all triangular forms have in common is that they generally require at least three weeks for their training.



As with the other formations, the **price target for all triangle formations is calculated on** the basis of the height of the formation. A small, short-term triangle, which may only be a few weeks old, will of course have less potential than a triangle that has developed over a longer period. Nevertheless, it should be emphasized that targets that appear unattractive can be exceeded many times over. On the other hand, large formations often result in seemingly unrealistic targets that are nevertheless reached surprisingly often.

**False trends** occur somewhat more frequently **with triangles** than with the previously described reversal formations and are not always easy to handle, especially with the symmetrical type. The following is therefore a brief list of possible undesirable developments and how to handle them:

1. The boundary lines are often truncated. This is particularly common in symmetrical triangles.

Handling: It must always be ensured that the boundary line is clearly and unambiguously broken through on a closing price basis. A simple "breakthrough" with a closing price on or within the formation indicates that probably only the formation boundaries need to be corrected and the triangle is therefore not yet complete. Since a triangle consists of a combination of several trend lines, such a correction is quite common.

2. The price falls back below the breakout line after a successful breakout (after a successful sell signal, the price rises above the support line again).

Handling: As a rule, the price should move quickly after breaking out of the formation. As part of a technical "pull back", they may test the breakout line again, but should not fall below (exceed) it. A closing price beyond this line calls into question the validity of this formation and should immediately lead to consequences with regard to any commitment made. In the case of symmetrical triangles, the apex of the triangle serves as an orientation line. Once a breakout has occurred, this line should no longer be crossed.

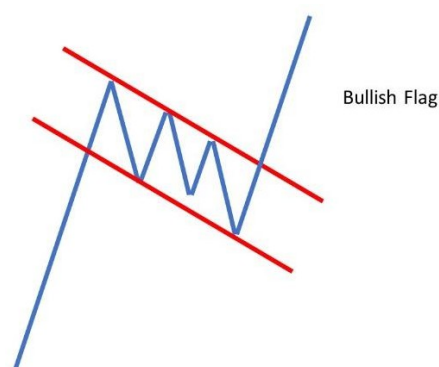
3. Erroneous developments (preferably apex violations) mainly occur in formations that already run for more than three quarters of their total expected development time. However, this fact jeopardizes the reliability of the formation anyway (see above).

4. Short-lived pennant formations, which have a completely different significance and are described later in the trend confirmation formations, are often confused with triangle formations, which then leads to false conclusions.

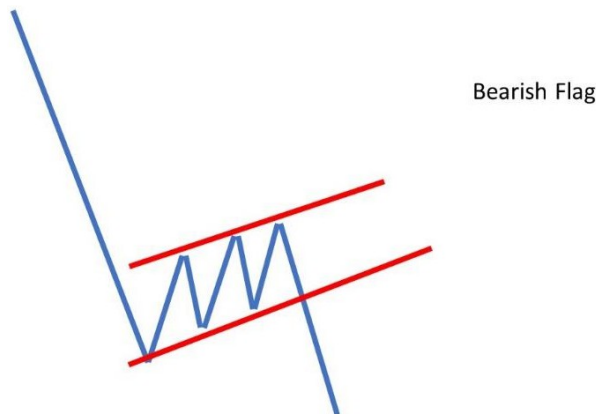
Handling: For this reason, the minimum formation time should be taken into account when forming triangles. Three weeks from the beginning of the formation (i.e. a bottom and a top must be present) to the triangle top is an absolute requirement. Triangles usually take one to two months to actually exist as a formation. Short-lived triangles should be classified as pennants.

### Flags and pennants

**Flags and pennants** are typical trend confirmation formations and can be explained in one section due to their similarities. Flags and pennants are short-lived (up to a maximum of 3 weeks) consolidation formations that can also be found in strong trends.



As no trend is linear and uninterrupted, the formations described here form in areas of consolidation or profit-taking.



The flag can appear as an upward or downward flag and usually appears after a sharp trend movement. The occurring congestion area resembles a small parallelogram or rectangle, which borders the chart with two tangents. It is not absolutely necessary for there to be a precise formation of bottoms or peaks. It is sufficient if the individual "intraday" peaks or bottoms are connected to each other. The tangents formed in this way may sometimes converge, so that the formation can also resemble a small wedge. Under no circumstances, however, should the trend lines diverge.

A frequently occurring characteristic of a flag is that it often has so-called "flagpoles", which are marked by one or more strong price movements in the previous days. It is also important to note that flags must always be directed against the trend. This means that upward flags ideally have two parallel, downward tangents, while the downward flag is bordered by two rising tangents.

Pennants are similar to symmetrical triangles, with the difference that they must be completed after a maximum of four weeks. Both flags and pennants are completed when the formation boundary in the direction of the trend has been overcome (preferably on a closing price basis).

**The price target is calculated in the same way for flags and pennants.** The decisive assessment basis for this is the trend movement preceding the formation. The only controversial point is the choice of the starting point, which is usually found at the point where the prices broke out of a previous consolidation or reversal formation (also applies if they have overcome an important trend line). The distance from the starting point to the uppermost (lowest) formation point, set at the point where prices break out when the chart is complete, is the minimum price target.

**Erroneous developments occur very rarely with both flags and pennants.** Both formations develop very reliably. However, the first "suspicious moments" of an erroneous development are given when prices do not quickly break away from the formation after it has been completed and instead "creep along" it for several days. One of the two trend continuation formations should be definitively called into question if prices rise above

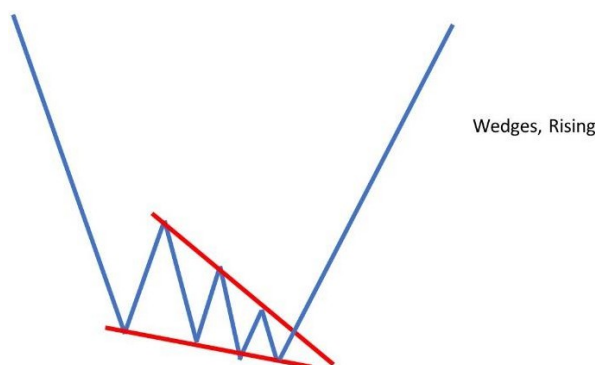


their geometric axis of symmetry. However, this is rarely the case - a new, larger consolidation formation is more likely to develop.

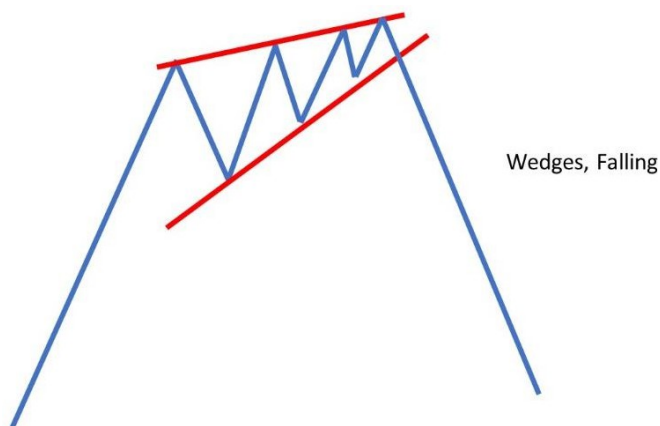
## Wedge

**Wedges** can be classified as triangles in terms of their appearance, although there are significant differences in terms of their meaning. As a rule, wedges are mainly known as trend reversal formations that develop at the end of a secondary or tertiary trend. In a wedge formation, the boundary lines always point in the same direction, while their angle of inclination varies. The same applies to falling wedges, although their upper limit falls more sharply than the lower limit of the formation.

An upward wedge indicates a market situation that is becoming technically weaker, while a downward wedge indicates a market that is becoming technically stronger. Trading signals arise in both wedge variants when prices (basis closing price) clearly break out of the formation to the downside (sell signal) or, in the case of a downward wedge, to the upside (buy signal).



In contrast to bullish or bearish triangles, the formation boundaries of a wedge formation must be filled in as fully as possible. The more pronounced a wedge is, the more reliable its significance.



Wedges, like triangles, take at least three weeks to form. Nevertheless, they are quite short-lived. While a triangle can last for several months, a wedge

The triggering of a trading signal is often more likely with a wedge. The price breakout from the formation should preferably occur in the last third of the formation, i.e. the chart should be well "filled". Wedges whose development spans less than three weeks generally do not have a trend-reversing character, but are more likely to be classified as flags that are still to be described.

Due to their rather short-lived nature, **price targets from wedges** are not always productive and do not have the usual reliability of other chart patterns. However, the reactions resulting from wedges should regularly be expected to correct the upward or downward movement that occurred during the formation, at least in its entirety.

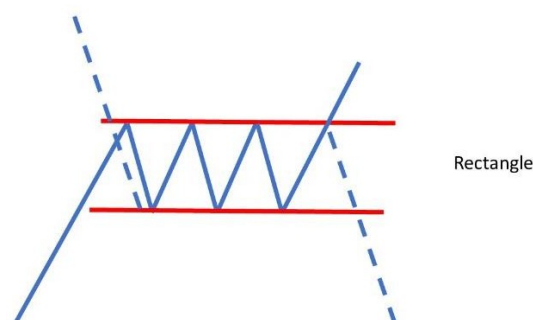
**False trends** very common **with wedges**. In the majority of cases, this is the case with fairly flat formations when prices break through the lower (upper) boundary line but then continue to move sideways.

It is not entirely clear when a wedge finally loses its reliability, as prices would have to return to the formation after breaking out and close within it. However, this rarely happens. It is therefore not insignificant to work with tight stops for wedges.

However, the real pitfalls of wedges lie mainly in the failure to reach price targets, so that a trailing stop must be used in any case in order to exploit the formation at least to some extent.

## Rectangles

A **rectangle** is a typical consolidation formation: prices move in a clearly defined sideways trend. Both the peaks and the bottoms are limited by horizontal lines. A rectangle is nothing more than a congestion area, as neither suppliers nor buyers can gain the upper hand. As with a symmetrical triangle, the further direction of a rectangle can only be predicted after a significant breakout to one side. Rectangles therefore belong to both trend reversal and trend confirmation formations. The latter is even much more common, so that in some reference works rectangles are only described as trend confirmation formations. Since a trading signal for a rectangle is only given after a breakout to one side, the classification plays a subordinate role anyway.



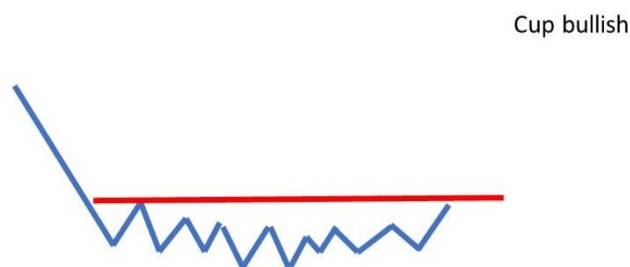
There is no minimum period of time required for a rectangle to form. As a rule, these formations last for a very long time.

As with many other chart patterns, rectangles can also be expected to pull back after a breakout.

**The price potential** of a **rectangle** is also **determined** by the height of the formation. The difference between the upper resistance line and the lower support gives the potential, which must be added or subtracted according to the direction of the breakout. This price potential should only be regarded as a minimum value; in practice, a price often reaches a multiple of this promised potential.

### Saucer

**Saucers** also belong to the group of reversal formations, but they very rarely. They usually develop over a period of several months and are characterized by very low intraday volatility. Saucers occur at the end of a downward trend and usually consist of a complex structure of small inverted shoulder-head-shoulder formations. The narrow trading band, which rounds off towards the bottom, usually shows a slight upward trend towards the end. This is where the somewhat strange-sounding name "saucer" comes from. In some cases, small platforms appear at the end of the formation which some chartists refer to as handles. When the upper limit of this formation is overcome, the trend change is completed, which is often followed by strong price increases.



The counterpart to the saucer is the upside-down saucer, which reverses an upward trend. It has the same characteristics as a saucer at the end of a downward trend, except that it is upside down.



The actual buy signal of a saucer is not clearly defined if it does not have a platform (handle). Some chartists are of the opinion that the formation gives the signal once it has completed its rounding. However, this opinion seems rather hazy, especially when there is no geometrically tangible clue for this signal.

If the saucer shows a tangible price peak (price floor) on its left side, the height of the subsequent buy signal (sell signal) on the right side of the saucer can be determined by drawing a horizontal line.

It is difficult to determine a **minimum price target** for saucers, as is the case with other formations. As saucers are usually at the end of important trends, considerable trend potential can often be expected once the formation has been completed. The absolute minimum price target should also be determined by the height of the formation. However, as saucers are usually very flat, it often makes little sense to bet on the minimum price target. However, as saucers are very significant chart formations, prices often reach a multiple of the indicated price potential after the formation is completed.

Completed formations are also quite reliable here, especially if they extend over several months. In this case, a long-term accumulation (distribution) has taken place, so that the supply (demand) should have been largely absorbed.

Before the formation is completed, however, so-called "shake-out movements" can occur in rare cases, whereby prices can even fall below the bottom of the formation. The trading volume shows whether this is a "shake-out". Ideally, the trading volume increases towards the end of the formation, as the slightly rising (falling) prices attract buyers (sellers). If the "shaking movement" is carried out with little volume, one should not be further impressed. Such reactions should generally be quite short-lived and quickly to the original trend. This is why you should work with generous stop prices for the saucer.